



THE GORGE OF THE VICTORIA FALLS IN THE DRY SEASON

Protophila

IN SOUTH CENTRAL AFRICA

BEING AN ACCOUNT OF SOME OF THE EXPERIENCES AND
JOURNEYS OF THE AUTHOR DURING A STAY
OF SIX YEARS IN THAT COUNTRY

BY
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WITH MAP AND PHOTOGRAPHS BY
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PREFACE

DURING a residence of some six years in South Central Africa (1903-1908), where I was engaged in the work of a mining engineer, much of my time was spent in visiting new districts in what was in many cases almost unknown country. I thus accumulated of necessity a good deal of novel and miscellaneous information. Having since been repeatedly asked by various friends to put this into book form, I have endeavoured to do so now.

In order to give continuity to the records and thus to make the book more interesting to the general reader, portions of different journeys have been grouped together instead of being always brought in in chronological order.

I have found the task of recording the events of my sojourn in Africa much harder than living the life itself there, and must ask the kindly reader to bear with the many shortcomings in style to be found in the following pages. Against this he will perhaps bear in mind that the record is that of one who has lived year in year out among the natives of those little-known climes, and not merely the impressions of a passing traveller.

Preface

I have to thank the Royal Geographical Society for permission to reproduce my map of the Kafue and Lusenfwa basins, and am also greatly indebted to several friends for much useful criticism and help in putting the following records into shape.

J. M. MOUBRAY.

February, 1912.

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In South Central Africa

CHAPTER I

Southern Rhodesia—The port of Beira—Transportation in Beira—The Pungwe Flats—Umtali—Inyanga—Marendellas—Bushmen drawings—Maswenas—Salisbury—Mount Hampden—The Mazoe Valley—Wild lemons—Fencing—Cattle diseases—Tobacco.

SOUTH Central Africa is reached most easily by the route that traverses Southern Rhodesia, either from Cape Town on the south or from the port of Beira on the east.

Although Southern Rhodesia is not itself a part of *South Central Africa*, it is connected with and will influence the development of the latter country to such an extent in the future that, in describing the conditions which obtain in the interior, a short space must also be devoted to that part of Rhodesia south of the Zambesi.

The journey from Cape Town to Bulawayo is too well known to be mentioned, but the route from Beira, besides passing through much more varied and interesting country, has not been so often described, the great majority of travellers making use of the other route.

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As Southern Rhodesia develops, the port of Beira is bound to become much more important, as it affords the natural outlet for the products of Southern Rhodesia, which lies directly behind it. The harbour is good, and it can only be a matter of time until this eastern route secures all the freight traffic except a few specialities, these last and perhaps a few of the higher-priced products of the country being all that will find their way out of the continent through the South African ports.

The town of Beira is built on what is really a large sandbank on one side of the mouth of the Pungwe River, whose estuary forms the harbour. Sand is not a stable foundation on which to build a town, but it has the advantage of being porous and always dry, and on this account it affords no opportunity for pools of stagnant water to be formed, to constitute the breeding-places of mosquitoes. Much of the adjoining coast-line is not sand, but a muddy swamp covered with mangrove trees, and this forms in places an ideal breeding-ground for mosquitoes, with malaria as a result.

On landing at Beira, one of the first things that strikes the stranger is the *ingenious method* adopted by the Portuguese residents to reduce to a minimum the amount of energy which they expend on travelling. In a few of the main streets a metalled surface has been laid down, but in the great majority there has been little attempt at road-making, with the result that the surface is not much different from that of a sandbank. On the streets, however, sandy surface or otherwise,

Transportation in Beira

narrow-gauge tram-lines have been laid, on which vehicular traffic of all kinds is conducted.

All the residents own small cars, which vary in style according to their owners' means, but are usually only chairs on wheels, with an awning supported above to protect the occupant from the sun ; these cars have, as a rule, seating capacity for two. When a Portuguese gentleman wants to go to his office in the morning, two of his native servants carry out his car and place it on the track in the street, when the owner takes his seat and the two natives start off, pushing the car before them at a run. When the destination is reached and the occupant has alighted, the two "push men" either take the car home again till it is required, or lift it off the track and carry it to the side of the street, when they often lie down beside it and go to sleep till they are wanted again. All the municipal work, such as street-cleaning and the like, is done by means of much larger box-cars drawn by oxen, and in the busy thoroughfares a special line for this slow traffic is laid on one side of the double track on which fast and passenger traffic is conducted.

The townsman of Beira walks as little as he possibly can, so that at a busy time of the day quite a number of these cars with their human motors are to be seen spinning along the different lines.

If one is entering this part of Africa for the first time, one cannot fail to notice almost instantly the three general classes into which human beings fall there, viz. the white man, the dago, and the nigger. In these parts the Indian and Chinaman are classed with the

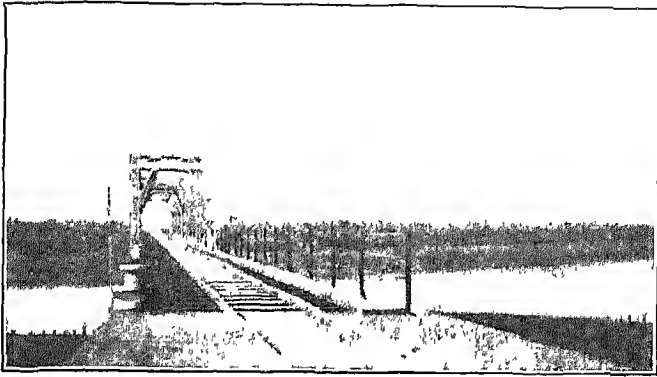
In South Central Africa

native, as the types of both of the former here met with are by no means advanced.

On landing, one's first effort is to get away from the port and up country as soon as possible, but after having been in the interior for some years, the smell of the sea is very welcome, and a few days spent at the port waiting for a steamer do not by any means always hang heavily.

On leaving the coast at Beira, on the railway journey to Rhodesia, many miles of flat country have to be traversed before the foot-hills are reached. A short distance from the start the Pungwe River is crossed, and then the line passes over a large extent of flat, swampy country, known as the Pungwe Flats. This tract is situated at only a slight elevation above sea-level, and in the wet season is mostly under water. The railway runs across it on a series of embankments, the rails being from ten to twenty feet above the ground-level. This section is probably the most unhealthy over which any railway in Africa passes; in fact, some of the old hands who were employed on this part of the construction and who are still alive, although they are few and far between, state that parts of the section cost in human life, for each rail that was laid a white man, and for each sleeper a native. Most of the gangers now employed on this section are Greeks or dagos, but they seldom remain for more than a short period; if not carried away by fever, they have to be removed to other sections on account of ill-health.

This flat country between the coast-line and the foot-



BRIDGE OVER THE PUNGWE RIVER
PORTUGUESE EAST AFRICA



MAKORIKORI NATIVES OF NORTHERN MASHONALAND

Umtali

hills is suitable in many places for the cultivation of sugar, certain kinds of rubber, cocoa-nuts, and other tropical produce. The Portuguese have a few small plantations, but have as yet, for all practical purposes, hardly touched their country. With local improvements, which could be effected from a health point of view, and with enterprise and a little capital, many districts in this low country could be made productive.

Portuguese territory extends to the foot-hills, at the base of which lies the town of Massikesse, and from this point the ascent is sharp until the town of Umtali, over the Rhodesian frontier, is reached.

The railway between these two towns winds and re-winds its way among the mountains, gradually climbing upwards from Massikesse, with its low country surroundings and vegetation. Within a few miles of Umtali, however, the flora becomes of quite a different character, and the conditions are almost similar to those obtaining on the Rhodesian tableland, although that elevation has not yet been reached. Umtali ranks among the four largest towns in Rhodesia and is a centre of both the mining and agricultural industries.

To the westward is the district of Melsetter, which, although at a somewhat lower elevation than most of Mashonaland and Matábeleland, has a great future before it as a fruit-producing and farming country; tobacco can also be grown with great ease in this district.

To the eastward of Umtali, at a distance of some ten miles, after a dividing ridge has been crossed, the Phenalonga Valley is entered. This valley is of in-

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terest chiefly on account of two large mines which lie near its upper end, about a mile apart, although there are also several others working.

On the mountains near Umtali, at their highest points, are to be found a few poor specimens of the indigenous cedar trees, which are to be seen growing to perfection at an altitude of 8000 feet and over on the mountains of Nyassaland.

To the north of Umtali rise the Inyanga Mountains, among whose ranges Mr. Cecil Rhodes had one of his farms. In many places in the Inyanga district evidences of extensive cultivation by the Ancients can be seen, together with their extraordinary irrigation system. Some of the old canals were constructed with such wonderful engineering skill that, with all our present-day knowledge, few if any improvements can be made in the channels by which the water was conducted from place to place.

Sometimes large round pits of considerable depth and having almost vertical sides are to be seen, which are stated by some authorities to have been used for keeping slaves in when they were not at work, and also at night-time, in order that they might not escape.

The sides of almost all the hills in many parts of the district are covered with terraces. These terraces were probably used for agricultural purposes, but why the cultivation of the land should have been conducted in this manner it is not easy to say. The stone walls that support the terraces are from two to four feet high, and are so placed as to form, when filled, a

Inyanga

shelf of soil some four to six feet between the retaining-walls. Such terraces cover whole sides of some of the hills.

Many explanations have been given to account for this peculiar method of cultivation having been adopted, some reasonable, but others rather far-fetched. I do not for a moment attempt to explain the system, but give the following native legend as being of interest and as affording a possible explanation.

“Many years ago the country was infested with rhinoceri, the natives then possessing no means of killing these animals, which were constantly raiding the gardens in the valleys and eating and destroying all the crops. In order that they might obtain the fruits of their labours, the natives moved their gardens from the valleys to the hill-sides and built there the numerous terraces of which we now see the remains. The plots of ground were necessarily small, being on a sloping hill-side, and each dividing-wall was built just high enough to prevent a rhinoceros from stepping over it, thus protecting the plots against the raids of these animals.

“After this method had been in vogue for a long time, the Portuguese began to appear on the coast and gradually worked their way inland, carrying firearms with them. The natives found that with the help of these weapons they could successfully resist the attacks of their four-footed enemies, and they gradually drove them away. The war continued till the rhinoceri left the country, after which the natives, having no more use for the tedious method of terrace cultivation, abandoned

In South Central Africa

the hills and returned to their old gardens in the valleys, where they still grow their crops."

It appears probable that the Inyanga district was used by the alien race who worked the gold-mines so extensively in the past between the Limpopo and Zambesi rivers, for producing corn and as a granary from which those who worked the mines drew their supplies.

In the higher parts of the Inyanga Mountains the climate is not unlike that of Britain. The grass is short and does *not* grow so rank as in the valleys, thus affording excellent pasture. A wet mist often sweeps over the hills during many months in the year, this being more like a Scotch mist than a fog, and it has the effect of keeping the grass fresh and green for a much longer period than is the case in the valleys below.

The Inyanga district should in time to come produce quantities of sheep and cattle, as it is well watered and grows grass which will eventually make excellent pasture-land.

The railway continues to rise from Umtali till Marendellas is reached, where the elevation is somewhat over 6000 feet. Much of the country in this part of Mashonaland is granite, with the result that small hills and bare boulders are frequently to be seen. In some of these hills one finds caves, on the sides of which can often be seen drawings of antelope and other animals. These are supposed to have been the work of a tribe of natives known as Bushmen, who still exist in a few of the more remote parts of South Africa and who live almost entirely by hunting, seldom if ever

Salisbury

attempting cultivation ; they are no longer to be found in Mashonaland.

The present inhabitants, the Mashonas, or Maswenas, as the other natives call them, which name signifies filth, are well known for their dislike of water for purposes of bodily cleanliness. I have been told by these people that the Great Spirit does not send rain during the dry season, so that he obviously does not mean them to wash during that period. Judging from my own experience, they seldom do so at any time.

From Marendellas the railway continues through a granite country, and falling to an elevation of a little over 4000 feet, the town of Salisbury, the capital of Mashonaland and of Southern Rhodesia, is reached. This town is close to some of the finest farming districts in Rhodesia and is within easy reach of many of the mining districts. The site is a good one, but it is not that originally intended, as the column which founded the town were instructed to locate it at the base of a hill known as Mount Hampden, some twelve miles to the north of the present town. They, however, mistook a kopje under which Salisbury now lies for that hill, with the result that they established themselves there and so founded the capital of Rhodesia.

There is no doubt that in many respects the intended site would have been a better one than the actual, but taking everything into consideration, many capitals are built in worse places than Salisbury.

Mount Hampden, however, stands at the head of the Mazoe Valley, which extends northwards for many miles, eventually merging into the low country as it.

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opens up on to the Zambesi Valley in Portuguese territory. To the south and west, as far as the eye can reach, extends a magnificent plain known as the Gwibi Flats, which in the not very distant future will support large herds of cattle, such as are seen in the middle western and western states of America. The big game on this plain are protected, and it is by no means an uncommon occurrence, when driving across it, to pass close to a flock of ostrich. The birds, through not being molested, have lost all fear of a vehicle drawn by horses and mules, and seldom trouble to move far when they see one.

The Mazoe district is making rapid headway both in farming and mining and, as the country develops, will probably become one of the most important in the whole of Rhodesia. It is well watered and the great bulk of the land is good, a fact which has been quickly taken advantage of, as can be seen from the number of farms occupied. Its desirability as a locality is also evident from the remains of old Jesuit mission stations which are met with in parts of the valley. From records at Lisbon, it appears that these early missionaries reached this land as long as four centuries ago. Evidences of their former occupation can now be seen in the very acceptable lemon trees which grow in some places along the river-banks. Those trees have in no way deteriorated during the time they have been out of cultivation ; the skin of the lemon has become somewhat thicker, but, instead of becoming smaller and more acid, the fruit is if anything larger and sweeter than the cultivated lemon. This shows the great

Fencing

possibilities of this part of Mashonaland as a citron-fruit producing country. It could if necessary supply the whole of South Africa with oranges, lemons and grape fruit, and then only a small fraction of the available orchard ground would be under cultivation.

Troops of grey monkeys live among the large trees which grow on the banks of the Mazoe River, and during the lemon season evince a strong liking for the fruit, as demonstrated by the number of lemons which are to be found lying under the trees partially eaten.

Rhodesia, like every new country, has had to suffer from the evils of over-capitalisation of many of her enterprises, especially mining, but a stage has now been reached when the various industries are settling down on a much more solid basis. In many young countries, soon after they come into existence, much money is wasted through the inexperience of those in charge of industrial concerns, before it dawns on shareholders and others that it is advisable to have an expert in charge of a particular business. Evidences of the former state of affairs are not, however, without their humorous side. I was one day riding past a large cattle estate and was surprised, on reaching one of the boundaries, to find two fences, but was even more astonished to learn their respective uses. It appeared that the inner fence was wild-pig proof and was used to keep the pigs out of the maize-fields, while the second one, parallel to it but at a distance of only a few yards, was lion proof, or was supposed to be, and its purpose was to prevent the access of these animals to the cattle-fields. I was told by the farmer in charge

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that the fences had been built under special instructions received from a high official in the company to whom the estate belonged, but have as yet been unable to reason out why it is impossible to build a single fence that shall be both lion and wild-pig proof.

The question of fencing touches upon possibly the most important industry that Rhodesia has to look to in the future, viz. cattle-breeding. Her gold-mines at present hold the first place, but in looking forward to the time when the gold-mining industry will be on the wane, the final prosperity of the land must rest on its agricultural possibilities. This must come sooner or later, although it may be some generations before mining reaches the state in which we now find it in Western Australia or California, where we have increased depth of the mines, increased cost per ton of working the ore, and decreased gold content, coupled with the fact of no new discoveries.

The present drawback to the cattle industry is the possibility of cattle disease, which in various forms has in the past swept over the country from time to time. It has been demonstrated that by isolation and disinfection these diseases can be overcome and eventually exterminated, but the former condition can only be attained by extensive and systematic fencing, which should be made compulsory. Some scheme should, however, be devised by the Government, whereby the farmer could obtain substantial assistance for fence construction, as the capital involved in fencing all his land is generally beyond the means of the average farmer. Further, a universal system of

Tobacco

dipping all cattle periodically is imperative ; this is now in vogue in many districts.

Speaking generally, Southern Rhodesia is not suitable for growing either cotton or coffee to perfection, but this is amply counterbalanced by the huge areas in Northern Rhodesia where excellent cotton can be produced (of which more later), and also coffee, if desired. Salisbury is rapidly coming to the front as the centre of an increasing tobacco industry. The Government has erected a large warehouse and buys the dried tobacco from the growers, when it is graded, treated, and marketed to the best advantage. Virginian tobacco is the most largely grown, but excellent Turkish and other varieties have also been produced. From what can be judged of this industry during the very few years that it has been in existence, it has a great future.

What is required in Rhodesia, as in all new countries, is to have men who are not afraid of taking their coats off and turning their hand to the work of the farm or plantation. It is such men who make their undertakings a success, and not those who are content to merely supervise and give instructions, being unwilling to soil their hands and considering manual labour of any kind undignified.

CHAPTER II

Ancient gold-mines—Estimate of gold taken from the country in the past—
Location of the land of Ophir—Method of working employed by the
Ancients—Early missionary legend—Matabeleland—Wankie coal-field—
Victoria Falls.

AS previously stated, mining, and that almost entirely gold-mining, is at the present time Southern Rhodesia's premier industry. For this reason, although there are many books which describe the gold-mines far better than I can pretend to do, a few lines on this particular subject may not be out of place here.

In the year 1897, Mr. T. Edwards, basing his statements on various reliable sources of information, estimated that gold to the value of £75,000,000 had been taken from the old workings in Southern Rhodesia in the past by the Ancients. Since that date many more old workings have been located, which were unknown at the time of this estimate, so that the above figure may now be taken as a very moderate one.

The old workings extend from the Limpopo on the south to the Zambesi on the north. Remains of temples and forts are scattered all over the country, proving the existence of a widespread civilisation in the past.

Evidences point to the fact that the alien conquerors

Ancient Gold-mines

enslaved the inhabitants of part of the land, compelling them to work in the mines, while the existence of lines of forts, whose object was presumably to protect the lines of communication between the head-quarters of the invaders, indicates that the great majority of the inhabitants remained hostile. These head-quarters were evidently situated at Zimbabwe, where splendid ruins of the ancient temple and forts can be seen.

It is held by some authorities to-day that the territory under question was probably the land of Ophir. I think that in view of the immense quantity of gold taken in the past from the old workings, much of which must have been gold of a fine quality (judging from the low content in silver of the present bullion produced from the mines), and from the following quotations from the Bible, the idea of locating the land of Ophir between the Limpopo and Zambesi rivers is considerably strengthened.

In the First Book of Kings, chapter ix., verses 27 and 28, we read: "AND HIRAM SENT IN THE NAVY HIS SERVANTS, SHIPMEN THAT HAD KNOWLEDGE OF THE SEA, WITH THE SERVANTS OF SOLOMON, AND THEY CAME TO OPHIR, AND FETCHED FROM THENCE GOLD, FOUR HUNDRED AND TWENTY TALENTS, AND BROUGHT IT TO KING SOLOMON."

This amount, calculated on the present value, would be worth approximately £2,000,000.

It is also stated in the First Book of Chronicles, chapter xxix., verse 4: "EVEN THREE THOUSAND TALENTS OF GOLD, OF THE GOLD OF OPHIR." The gold of Ophir was evidently noted for its fineness.

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This last amount, at present value, would be worth the enormous sum of about £14,000,000.

In the face of the figures just quoted, it is very questionable if there was any other country in King Solomon's time capable of supplying such a quantity of gold.

Almost all the mines in Southern Rhodesia produce free-milling ore, that is, ore in which the gold is unalloyed with some baser metal, and so the gold can be caught by crushing the ore and running the pulp over copper plates coated with mercury.

The Ancients used simply to pulverise the ore in stone mortars, or grind it between two stones, and then separate the gold from the crushed rock by washing. Remains of mortars and grinding-stones can sometimes be found beside a stream near old mine workings.

The ancient miners do not seem to have been able to cope with any appreciable quantity of water, consequently few old workings are found that have penetrated much below the natural water-level. Pumps of any kind do not appear to have been known.

Hardness of the rock to be worked was apparently no hindrance, as with free slave labour time was of little object. Extensive workings are often met with in rock that to-day could only be managed by using dynamite.

It is probable that fire-setting was the method adopted for breaking the rock when it became too hard for pick-work. This consists in building a fire of wood against the rock, and when as high a temperature as possible has been attained, the fire is scraped away and water is

Location of the land of Ophir

thrown on the hot face, which cracks and splits, and can then in part be removed.

Some of these old workings reach a depth of 120 feet, and with the means then at command, the time over which work extended must have been considerable. The present natives of Mashonaland have no knowledge of working gold, but those of the Zambesi Valley wash gold out of the alluvial gravels to this day, and till the arrival of the White Man in Rhodesia they used to work reef-gold by shallow workings, which they entered by small round shafts in soft ground. I have seen in several of these small shafts the notches in the sides, in fairly soft ground, with the toe-marks easily distinguishable, showing that they had been worked at quite a recent date.

These gold-reefs were, however, worked during this more recent period by natives who probably only learnt the value of gold after the arrival of the Portuguese in Africa. This is borne out by the fact that large trees of a great age are found in some of the old workings, showing that probably a long period elapsed between the abandonment of the workings in the first instance and the resumption of work in much more recent times.

It is supposed that the alien race was suddenly and completely annihilated, either by a rising of the people among whom they lived and some of whom they had enslaved, or by a sudden rush of the savage hordes who lived to the northwards. It is probable also that with this defeat the ancient civilisation was extinguished in the country, which then reverted to savagery.

In South Central Africa

At a later date some sort of civilisation must have been introduced, possibly from the East Coast, for when the early Portuguese missionaries penetrated into the interior in the sixteenth century, they spoke of it. The natives of the Zambesi country have a legend, which is undoubtedly founded on fact, and which runs as follows :—

“Long ago a Jesuit missionary journeyed into the interior, with the object of introducing Christianity to its inhabitants. He travelled on and on, and at last, hearing of the seat of a great empire, he directed his steps there, and eventually arrived at the palace of the Empress of a country known as Monomotapa. Here, however, he found that he had been preceded by the teachers of the religion of Mohammed, but being a good man he tried for many days to persuade the Empress and her followers to accept the true religion. He was making some progress, when one day he was seized and put to death by his enemies, and his body was thrown into one of the tributaries of the Zambesi. Although the river was swarming with crocodiles, which his enemies expected would at once consume the body, these creatures recognised the presence of the Holy Man who had laboured so long for the good of the country, and escorted and guarded his body as it floated down-stream and at last entered the mother river Zambesi. There it continued its course towards the mouth, without being touched by either bird or beast, in such reverence had the missionary been held. When the body neared the sea, the birds and beasts were loath to part from it, with the result that on

Early Missionary Legend

reaching a small island near the mouth, the crocodiles pushed the body on to the sand and the leopards came and carried it up among the trees and bushes, clear of the water. When it had been laid to rest, a number of storks arrived and took up their residence on the island, in order to guard it."

Some of the natives to this day tell of the duty performed by these storks, which they refrain from molesting, saying that they are still guarding the body of the Holy Father whom the people of the interior put to death, but whose merit was recognised by the birds and beasts.

In Southern Rhodesia there are a number of small gold-mines which are being worked profitably by three or four white men and a few natives ; it is these small producers or tributers who have done much to make the country.

If a property turns out on working to be larger than was originally expected, there are always companies ready to take it over. The gold-reefs have been proved to extend to a considerable depth, as is seen in such mines as the Globe and Phoenix, Selukwe, and others.

There are unquestionably many payable reefs which have yet to be discovered, and as a field for the prospector there are many less promising countries than Southern Rhodesia.

Chrome ore has been found at Selukwe in large quantities, and it is probable that other minerals will also be discovered in payable deposits.

As one travels by train from Salisbury to Bulawayo,

In South Central Africa

the appearance of the country changes somewhat. The well-wooded, hilly, and undulating bush country of Mashonaland is left behind, and when Matabeleland is reached, the surface becomes more flat and the bush gives place to open plains and tracts of mimosa bush. The towns of Hartley and Gwelo are passed on the way, and here and there new homesteads can be seen springing up, where only a few years ago Nature was undisturbed. Matabeleland is *par excellence* a cattle country, in contrast to Mashonaland's suitability for general agriculture.

Bulawayo, the capital, is built on a flat site, not far from the old head-quarters of King Lobengula. The town has been well laid out, but has the fault peculiar to many Rhodesian towns of having its railway station nearly a mile away. The surrounding country is flat and uninteresting, the monotony being only broken here and there by a few flat-topped hills, except to the southwards, where the Matopo Hills rise ; nestling among these is the bare granite kopje on whose summit has been cut the tomb of the late Cecil Rhodes. As one stands beside the grave on this lonely hill, the panorama gradually unfolds itself, showing range upon range of rugged granite rocks extending to the horizon. It is said to have been among these solitudes, where his mortal remains now lie, that the founder of Rhodesia used to come and dream over the gigantic schemes, the realisation of some of which we have already seen. A more fitting resting-place could scarcely be found. A few hundred feet on one side of the grave a



STATUE OF CECIL RHODES IN BULAWAYO

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Wankie Coal-field

memorial has been erected to that brave band of pioneers who in the early days were killed by the Matabele on the Shangani River.

From Bulawayo to the Victoria Falls the journey takes some eighteen hours by rail, and at one part the line goes for many miles through a forest of African teak. A few hours before reaching the falls, the train passes through the Wankie coal-field. There is as yet only one mine working there, and from it the coal supply of Rhodesia is drawn. The mine lies in a depression, and the descent from the surrounding tableland is so considerable that the climate at the mine is very much hotter than that above. The coal seams outcrop and lie at a fairly easy dip.

The coal, although not of first-class quality, affords a serviceable supply of fuel, and it is used on the railway and at the mines and towns near the railway, throughout the country.

On nearing the Victoria Falls, in the season when the river is full, a column of vapour can be seen rising into the air to a height of many hundred feet, and on approaching still nearer, the roar of the falling water increases in volume, until near the brink of the falls it is almost deafening.

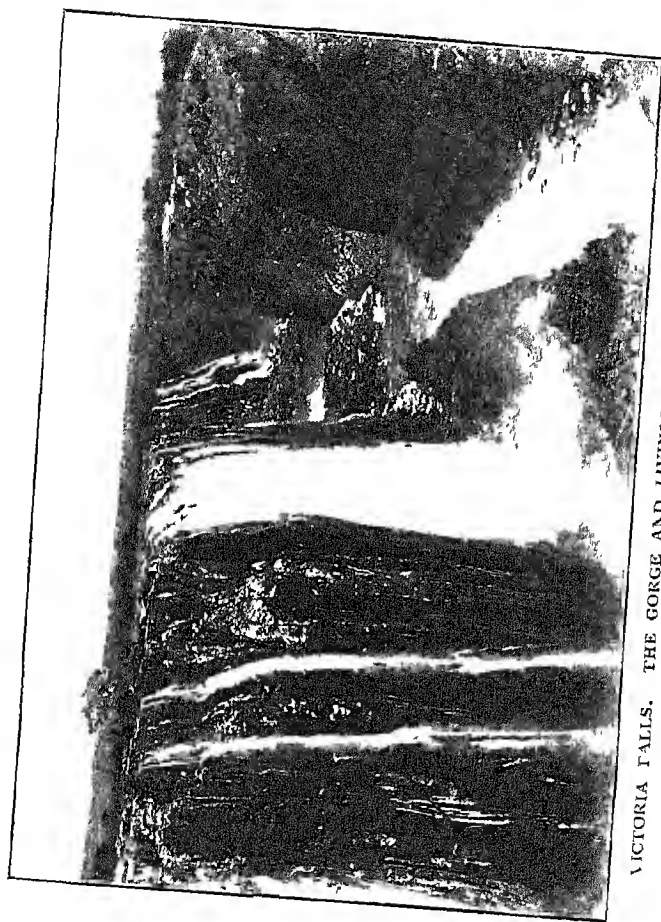
The height through which the water falls is 400 feet vertical, and the total length of the lip or brim is 1 mile 169 yards. The volume of water passing over varies greatly with the season, being governed by the rainfall at the huge marshes from which the river draws its supplies, and which lie

In South Central Africa

far to the north-west, and not by the actual rainfall near the falls themselves. When the river is at its height it is impossible to obtain a comprehensive view of the falls, as the spray formed by the enormous volume of falling water is so great as to obscure most of the gorge ; magnificent rainbow effects, however, are to be seen. Probably the best time to visit the falls is when the river is about half full, say in April or May, and before the grass has been burnt. One can then get a good view of the gorge and can form some idea of the immense size of the falls.

As with most great scenes, the traveller is unable to take it all in at first, but after several visits it seems to grow grander and more awe-inspiring. The gorge is comparatively narrow, and a constant shower of spray is carried upwards to the opposite bank of the gorge, by the reflex current of air produced by the shower of falling water. This continually moist atmosphere has produced what is known as the rain forest, which is made up of palms and other moisture-loving plants and trees ; were it not for the peculiar local conditions, these would be unable to survive the dry season.

Paths have been constructed through this forest, and in the hot weather a walk there is both pleasant and refreshing. Near the centre of the brink, almost on the edge, is a small island known as Livingstone's Island, and upon it can still be seen the tree upon which Dr. Livingstone carved his name and the date when he discovered and named the Victoria Falls.



VICTORIA FALLS. THE GORGE AND LIVINGSTONE ISLAND DRY SEASON

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Victoria Falls

The Victoria Falls are without doubt the finest in the world. The Niagara Falls are less than half the height of those on the Zambesi, but have the advantage of being visible as a whole from a point some distance off. Still, although they are a magnificent sight, the feeling of vastness which gradually steals over one on closer acquaintance with the Victoria Falls is wanting at Niagara. I have been told that the Grand Falls on the Hamilton River in Labrador far surpass those of Niagara. These falls are some 300 feet in height and have as yet been seen by only a few white men. I have unfortunately been no nearer to them myself than the mouth of the Hamilton River, so cannot speak of them from personal experience.

The Victoria Falls are undoubtedly one of the wonders of the world. This fact is being more and more recognised as time goes on, as evidenced by the increasing number of visitors that yearly visit them.

I had the pleasure of meeting Mr. Roosevelt at the White House, Washington, in 1908, while he was still President, and before he had definitely decided which route he would take on his then forthcoming shooting trip. I had not long returned from Africa, and he evidently made it a point to obtain all his information at first hand. Almost the first words he said on my being introduced were, "I CAN TELL AT ONCE THAT YOU ARE AN OUTDOOR MAN." He was then considering whether he should, as he ultimately did, enter Africa from the East Coast and

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then travel northwards down the Nile; or southwards, passing the Victoria Falls, and leaving Africa by Cape Town. He said he had a very great wish to see the falls, but other considerations later decided on the northern route being taken.

The Zambesi is crossed by a magnificent bridge of one span, which takes the traveller from South Africa into Central Africa. Rhodes desired that, if possible, this bridge, on what would eventually become the Cape-to-Cairo Railway, should cross the river where the spray of the falls would blow on the carriage-windows. This has in part been accomplished, and although the whole of the falls cannot be seen from the train, a fine view of the northern end can be obtained. Speaking generally, when we cross the Zambesi at the Victoria Falls, we pass from a White Man's country into a country from which the European requires a periodical change, although there are high sections in Northern Rhodesia as healthy as many parts south of the river.

A comfortable hotel has been built on the south side of the river, and here most of the tourists who visit the falls stay.

It is probable that in the not very distant future some of the immense quantity of power that is now going to waste will be utilised. The water required to generate enormous power would hardly be missed. This has been amply exemplified in the case of Niagara, where thousands of horse-power are continually being generated, and no appreciable effect on the falls can be seen. It has to be remembered that the fall on the Zambesi is more than double the height



THE MAIN FALL. VICTORIA FALLS

(To face page 24)

Sport

of that at Niagara, consequently less than half the volume of water would be required to generate an equal supply of power. The water could be diverted and the power-houses so placed that the scenic effect would be in no way spoiled.

A sort of national park has already been established, including all the ground immediately round the falls. The trees will be preserved and continual improvements made, so that in a few years' time the surroundings, although remaining in their natural state, will be very greatly improved.

Good angling can be obtained in the gorge below the falls, the fish caught being a kind of tiger-fish, weighing up to several pounds.

The river below the gorge is narrow and deep, but above it is wide and slow-flowing, forming one of the most ideal stretches for rowing.

The Barotse natives make good canoe-men, although they are far behind some of the lake people of the interior in the way they handle their canoes. Boats can be obtained on the river, and if there are no obnoxious hippo about, it is very pleasant to row some miles up the stream to Livingstone. As a rule hippo will not interfere with a canoe or boat, but during certain seasons they sometimes try to upset it; this is by no means enjoyable, especially if one is in the vicinity of the brink of the falls or in the rapids not very far above.

CHAPTER III

Livingstone—Kalomo—Zambesi natives—The Barotse—Trotting oxen—The Lower Kafue River—Tsetse-fly—Baila or Mashakalumbwi—Lusaka—Civilising the native—The “Call of Africa.”

THE town of Livingstone, now the capital of Northern Rhodesia, is built on rising ground on the northern bank of the Zambesi, some four miles above the Victoria Falls. It has sprung into existence since 1907. Previous to that time Kalomo, through which the railway passes, about ninety miles to the northwards, was the capital of North-Western Rhodesia and the seat of the administration. Since then, however, North-Eastern and North-Western Rhodesia have been brought together under what will be known as Northern Rhodesia, with the seat of administration at Livingstone. It does not appear to be an entirely desirable condition of affairs to have the capital of a large territory situated at its extreme end, and in days to come, when the country has developed, it is within the bounds of possibility that a new capital may arise on the high healthy grass-lands north of the Kafue River.

Kalomo was built on what appeared to be an excellent site, viz. on an open undulating plain; but the soil and subsoil were of a sandy nature and rested on

Zambesi Natives

an uneven, undecomposed, impervious granite bed-rock. This rock, owing to its uneven nature, held numerous pools of stagnant water, which was unable to evaporate on account of the covering. As there were no means by which the water could drain away from these small sub-surface ponds, it can be easily understood that the site soon became very unhealthy, from the refuse of the town percolating into the ground and accumulating in the pools. Matters reached such a climax, owing to the number of Europeans who died during the bad season, that the town was moved bodily to Livingstone.

Livingstone also is built on sand, but the drainage is good, and the drawback of having roads of sand is being overcome by metalling the surface. The sanitary arrangements are now satisfactory; but in the early days of this town, if one happened to be about at an early hour, it was no uncommon sight to see a native servant digging a hole in the middle of the street (which was then only sand), opposite his master's house, and burying therein the various refuse which would otherwise have had to be carried some distance to a rubbish-bin. This goes to show that sandy streets are not without their advantages to one class of the population, some of whom, no doubt, view the making of good hard roads with mixed feelings.

There is a tribe of natives, known as Zambesis, living close to these parts, who knock out the two centre upper front teeth. The reason given for this is that at some now distant date the chief of the tribe, having one night dined "not wisely, but too well,"

In South Central Africa

fell on the way to his sleeping-hut, and hitting his mouth against a stone, knocked out his two upper front teeth. On arriving inside and talking the matter over with his principal wife, they came to the conclusion that it would never do for the chief to be the only man who had no front teeth; so next day the royal word went round that every man was to remove his two upper front teeth, and it is done by the males of the tribe to this day.

Some days' journey up the Zambesi from the Victoria Falls lies Lealui, the dry-season residence of Luanika, King of the Barotse. This tribe is by far the most powerful in North-Western Rhodesia, and until the British South Africa Company took over the country the Barotse King used to exact tribute from many of the surrounding tribes. These people own quantities of cattle and inhabit a fertile country beside the Upper Zambesi. Up to quite a recent date the King used to work some copper-mines in the north-east section of his country. The Barotse are skilled in the management of canoes, and are good hunters and good fighters.

They have their own version of the story of "The race between the hare and the tortoise," which is, if anything, cleverer than ours, viz. :—

"A tortoise one day met a hare, and after some preliminary talk a race was arranged. After the course and time had been decided upon, the animals went home to rest. The tortoise had insisted upon a fairly long course, the starting-point not being visible from the finishing-point, and on the day of the race he arranged

Trotting Oxen

with his brother, who was just like him, to go to the starting-point, while he himself went to the goal. The hare duly arrived at the starting-point and the race began, the hare at once leaving the tortoise far behind, who then went into the bush and hid. Imagine the hare's surprise, just as he came in sight of the winning-post, to see the tortoise walking slowly in first ! ”

The Barotse are an offshoot from the Basutos, being a section of that tribe who quarrelled with the chief and left to set up a kingdom of their own, eventually settling where they now live. Much of the land close to the Zambesi is flat, and it floods in the wet season, with the result that the people evacuate their dry-season quarters on the river and move to some higher ground further back while the floods last.

Returning to the railway and travelling northwards again, the next section is from Livingstone to the Kafue River.

In the days before the railway crossed the Zambesi, this journey was done by ox-waggon, or by the faster method by which the mails were carried, viz. in a Cape cart drawn by trotting oxen. This last is perhaps one of the most uncomfortable methods of travelling imaginable, as one can get no rest. The journey lasts for about six days, with continuous travelling day and night. The oxen cover stages of six to ten miles, and at an average pace of perhaps four miles an hour. Just as one gets settled down and is beginning to sleep, a new stage is reached ; the old lot of oxen are outspanned and a new lot put in, necessitating getting out of the cart and a delay of anything from half an

In South Central Africa

hour to several hours, as the new oxen may not be ready or may be grazing some distance away.

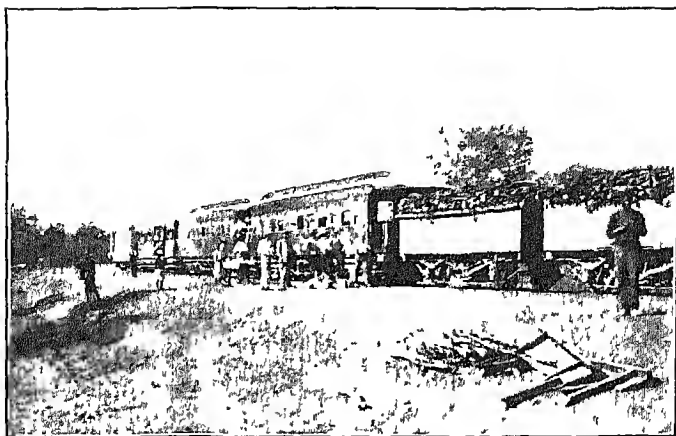
The first time I travelled from Kalomo to the Kafue River, the men in the villages through which we passed did not wear a stitch of clothing, except perhaps a string with a button on it round their stomach, and the women often little more. As the trader gradually advanced through the country the fashion changed, and now one sees these people more or less clothed.

The official price of fowls was then six for a shilling, but in the neighbourhood of White settlements they cannot now be bought at this price. The native fowl is often little larger than a good-sized English domestic pigeon.

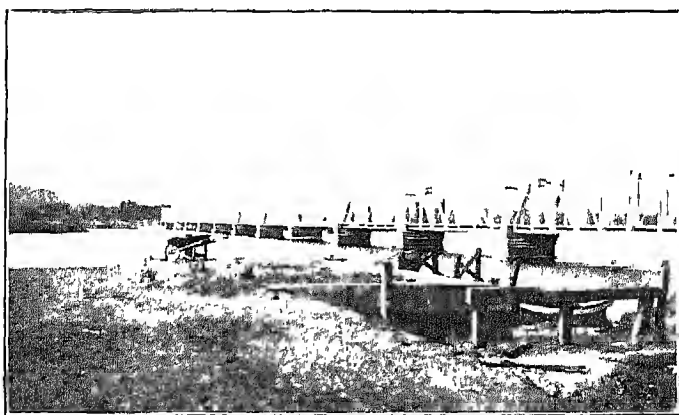
Eggs can almost always be obtained, but it is advisable to test their age before making a purchase, as the native is not averse from eating one even if it has developed to the extent of there being a chicken inside. A small amount of salt will purchase a few eggs in out-of-the-way places.

After Kalomo has been passed, the railway climbs over the undulating country which forms the divide between the Zambesi and Lower Kafue watersheds. The land is of a sandy nature and is here and there covered with patches of mopani timber. This wood is extremely hard, so much so, in fact, that if used for mine timbers, it should be cut into the shapes required before it dries, as it then becomes almost too hard to be worked with tools.

As the Kafue River is neared, the railway emerges on an immense treeless plain, which in the wet season



THE TRAIN NORTH OF THE VICTORIA FALLS



RAILWAY BRIDGE OVER THE LOWER KAFUE RIVER
NORTH-WESTERN RHODESIA

Baila or Mashakalumbwi

is almost covered with water, owing to the river overflowing its low-lying banks. Some weeks after the rains have ceased, however, the water has gone, and the plain in the dry season becomes dry and hard.

The river is crossed by a fine bridge of fifteen spans, each 100 feet long, one of the longest bridges in Africa. It is navigable for craft of shallow draught up-stream to the westward, in which direction it is slow-flowing for many miles, but very shortly after it leaves the bridge on its journey to the sea, it enters upon a series of rapids which effectually check all navigation.

From Kalomo northwards, the tsetse-fly begins to make its appearance, till a line is reached north of the Kafue, to the northwards of which the country is wholly inside the "fly" area. The fertile plains through which the Kafue winds before it reaches the railway, however, are mostly free from tsetse, and the natives who inhabit them own considerable quantities of cattle. These people are known as the Baila or Mashakalumbwi, and are a numerous tribe and somewhat warlike. They were in the habit, until recently, of making their hair into a cone some eighteen inches high, matting it together with mud and oil. This cone was a solid mass, and at night, in order that it might not be broken by its owner altering his position during sleep, the apex was raised some distance off the floor by being tied to the roof with a string. When the White Man came into the country and the natives began to work, the work consisting in the

In South Central Africa

first instance chiefly in transporting goods (which the native does most easily by carrying the loads on his head), the head decoration was found to be very much in the way, with the result that it has almost entirely disappeared and in a few years will probably have fallen completely into disuse.

The Baila are one of the few African tribes who fight in the night-time. They use a slender throwing-spear, some six or eight feet long, with a thin iron blade. They are feared by the surrounding tribes and have the reputation throughout the country of being very fierce.

The Kafue plains stretch away to the north of the river, the ground rising in a series of small hills till the elevation of the central tableland is reached. The land at the bottom of these hills on the edges of the plains has been proved to be capable of growing cotton, and when the right varieties are introduced, the area capable of producing this crop will be large. Labour is by no means scarce, if the natives can be induced to take to this kind of work, and with the Kafue River as a means of transport to the railway, this district should in time to come grow a by no means negligible quantity of cotton.

The railway rises from the Kafue, northwards, till at Lusaka the elevation is over 5000 feet and the country has changed into rolling, slightly undulating, grass plains, somewhat like those near Kalomo, and which will one day support large numbers of cattle. Several Dutch families have already settled in the neighbourhood, and the station at Lusaka has been used as a base from

Lusaka

which machinery has been transported by ox-waggon and traction-engine to the group of mines in the Hook of the Kafue, there being a zone along the watershed between the Upper and Lower Kafue more or less free from tsetse-fly.

The next place of any note north of Lusaka is Mwomboshi, which before the arrival of the railway and the consequent removal to Broken Hill, in 1906, used to be the residence of the Magistrate and District Commissioner of what was at one time the most remote district in North-Eastern Rhodesia. The opening of the country from the south, however, changed the geography completely, and instead of entering North-Western Rhodesia from the east, through North-Eastern Rhodesia, which was reached by travelling up the Zambesi, followed by a long overland journey, the position is now reversed, North-Eastern Rhodesia being reached by rail from the south and then overland from Broken Hill.

The native in these parts is now passing through the stage from which his South African brother has emerged. He has lost much of his charm with the introduction of civilised ideas.

The savage pure and simple is a delightful person to meet. He is hospitable, courteous, and more or less truthful; but as he begins to assimilate the rudiments of the White Man's civilisation, he loses these qualities, especially the last.

Where one used to meet the native in his own dress, which consisted probably of a skin or two, or perhaps even less, the man is now to be seen with a boot on one

In South Central Africa

foot and a sock on the other, clothed in an old pair of trousers and a slouch hat. In towns where the native has been in contact with the White Man for some time, he is generally quite up to the European standard in his dress, and it is noticeable that the more he advances along this line the less does he appear to like work and the more unreliable does he become. I do not for a moment intend to discuss the negro question, which can never really be understood by people at home who have never lived in a Black country, but the time is not far distant when this will have to be faced in South Africa. The African native has great capacity. I once had a native in my employ who not many years previously had been a savage. He had been taught arithmetic at school, and as he appeared quick to learn, I taught him to check various calculations in survey work, until in the end he could work out simple astronomical calculations. It must not be assumed that all natives are like this, but it shows the wonderful adaptability of the savage mind.

This brings one on to the much-debated mission question. The average White Man has nothing too bad to say of missions and will never employ a mission boy if he can possibly help it. It is unfortunately the case that many of the mission boys met with are rogues of the first water, but this is easily accounted for. I think the best analogy is one that was given me by an old missionary, a man who had spent almost all his life at his work, and who, in looking round, could see, as he told me, very little result as yet. He said that in building a railway over a swamp, many hundred tons of rock

Civilising the Native

were swallowed up in making the fill, before any result whatever could be seen on the surface. The foul gases in the swamp were thus disturbed and liberated, with the result that the surface appeared more foul than when work was commenced. Yet without that invisible foundation, which required great expenditure of both life and energy, the embankment which would eventually carry the train in safety over the swamp could never be built.

Some day, when the history of Central Africa comes to be written and people are able to look back with the unbiassed view attainable only by lapse of time, the debt that the country owes to the missionary, who cheerfully gives his life in an attempt to better the native, will be recognised.

It would be unreasonable to expect that, in a generation or two, savage races should be able to throw off all their old customs and traditions and accept the restraints of a new moral code. In the transformation many relapses and disappointments must be met with.

I am by no means prepared to defend many of the methods employed by some missionary societies, but there are others (and I am now speaking from a somewhat intimate acquaintance with them) whose unobtrusive work, carried steadily on, is accomplishing incalculable good. Natives are being taught useful trades and their languages are being reduced to writing. They are being taught a simple rotation of crops and how to get the most out of the soil, how to keep their village in a sanitary condition and how to combat various epidemics, besides having the gospel preached

The "Call of Africa"

to them. Such conditions cannot tend otherwise than to the ultimate uplifting of a race.

The language question is an interesting one. Throughout South Africa a collection of native words, chiefly Zulu, known as Kitchin Kaffir and having no grammar whatever, serves as the means of communication between the native and the European. This has spread into Central Africa with the advance of the railway. In the future, this absurd medium of communication will undoubtedly be replaced by English. In Central Africa, owing to the small proportion of Whites to Blacks, the White Man has in many cases taken the trouble to learn the language of the tribe among whom he lives. It is only to be lamented that this course has not been more generally adopted, but it is not usual for the average Briton to acquire a knowledge of any language except his own, if he can possibly help it.

Africa, especially the lesser-known parts, has a strange fascination. There are few of her adopted sons who have really known the wild interior and its vast silences who do not long to return to her again. There is an old Arab proverb which expresses this continual quiet, persistent calling, that can only be satisfied in one way: "If you have once drunk of the waters of Africa, you will return to drink of them again."

To those who live in the towns and well-settled parts, where conditions are little different from those in other portions of the civilised world, the "Call of Africa" is not necessarily so strong, if it exists at all. But when

In South Central Africa

one has spent considerable periods with only natives as companions, speaking for weeks at a time no word of English, it is not to be wondered at that, given congenial occupation, one's view of outside events should take a somewhat different shape. The invisible bonds which bind him to the vast plains over which undisturbed herds of wild animals roam, to the great rivers teeming with wild life, and to the endless forests with their great silences, become stronger and stronger, till in the end they are hard indeed to break.

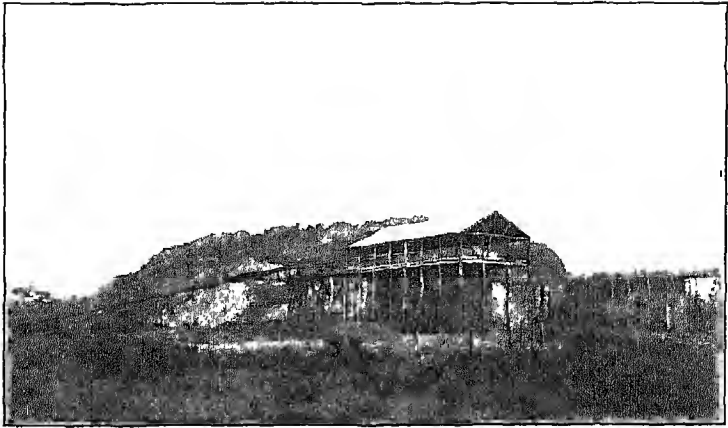
CHAPTER IV

Rhodesia Broken Hill—Occurrence of the ore—The Bone Cave—Evidences of prehistoric man—Recent local migration—Hyenas—Present terminus of the Cape-to-Cairo Railway—Provisions—Cannibals—Health of the European.

FROM Mwomboshi to Rhodesia Broken Hill the line runs through fairly flat country, over which are scattered in places large ant-hills. It is related that, when possible, the railway engineers deviated the line, in order to avoid cutting through these hills; in some places, however, this was not practicable, and the train passes through several quite formidable small cuttings caused by nothing else than the industrious white ant. As white ants would soon consume any timber sleepers or telegraph-poles, these are made of metal throughout Central Africa, and also in many parts of South Africa.

Broken Hill is just over 2000 miles from Cape Town by rail. The mine was named by Mr. T. G. Davey, who discovered it, and consists of extensive deposits of complex ores of zinc and lead.

The deposits are seen on the surface as kopjes or small hills, of which there are seven within a radius of about half a mile. The ore is of thermal origin, the different kopjes indicating separate vents through which the mineral-bearing steam or solution found its



CALCINERS AT BROKEN HILL, WITH NO. 2 KOPJE
IN THE BACKGROUND



ON THE MARCH

The Bone Cave

way to the surface. One of the kopjes attains a height of over 100 feet above the surrounding country, which is flat for many miles round.

Exploration work has been carried out by shafts and diamond drills to a depth of about 200 feet below the natural water-level, which in the wet season is within a few feet of the surface, and in the dry season drops to a depth of about twenty feet from the ground-line, but all the ore yet met with has been of an oxidised nature. This is somewhat extraordinary, as, in the ordinary course of events, sulphides are met with at or immediately below the natural water-level, and from evidences shown by the surrounding country it is apparent that for a very long time, and probably for the whole period that has elapsed since the formation of the Broken Hill deposits to the present day, there has been no material alteration in the water-level. Many ores of zinc and lead occur, the most important being carbonate of lead and carbonate and silicate of zinc; but these are found in such intimate mixture that they cannot at present be worked at a profit by any known method. Isolated patches of pure carbonate of lead and of zinc also occur, but they only form a small fraction of the deposit.

Two minerals new to science have been found at Rhodesia Broken Hill, both being complex phosphates of zinc. They have been named respectively tarbuttite and para-hopeite.

One of the most interesting discoveries made at the mine was what is known as the Bone Cave. This is a cavity in one of the outcrops lying below the surface

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of the surrounding country, so that in the wet season it became full of water. The cavity or cave was found to be filled nearly to the top with *débris* made up principally of bones and teeth of various animals. Careful examination of some of the excavated *débris* brought to light quartz implements in the form of bone-scrapers and arrow-heads, and most of the large bones showed evidences of having been split by artificial means, no doubt for the sake of the marrow that they contained. Many of the bones are of animals which still roam over the surrounding country, but a few are of animals now extinct; one of the latter has been identified by a competent authority as belonging to a species of rhinoceros.

It is probable that the inhabitants of the country at that time were not cannibals, as no human bones have been found among the other animal remains.

The bones and teeth have had all or nearly all of the calcium which they contained replaced by zinc, and the roof of the cavern was encrusted with a coating of beautiful crystals of hopeite.

Arriving at Broken Hill in the early days, one came in contact with natives who had not then come to think as the White Man does regarding ordinary matters. As illustrating this, the following story may be of interest: A White Man was in charge of a large number of "green" natives, who were doing some surface pick-and-shovel work. Now this man some time before had had the misfortune to lose one of his eyes, for which a glass one had been substituted. As the work progressed and the day got warmer, the White

Recent Local Migration

Man hit upon the brilliant idea of taking out his glass eye and placing it on a rock in view of all the natives, and then retiring to some adjacent shady spot to take a rest. The plan worked well for several days, the natives believing that the eye was a real one and would, when put back in its place, tell its owner all that it had seen : consequently they continued to work. After some days, however, one native who had been cogitating over the matter crept up to the rock and gently placed an old hat over the eye. Work was then promptly suspended and not resumed until shortly before the usual time for the White Man's return, when the hat was removed. Everyone being now busy, the eye had never seen the natives idle, and consequently it could not tell its owner so when returned to his head.

Broken Hill lies almost on the watershed between two of the largest rivers in North-Western Rhodesia, the slope falling towards the Kafue on the west and the Lusenfwa on the east. There are evidences that at a comparatively recent date there was a large population in the immediate vicinity of Broken Hill. This can be seen by the state of the surrounding bush, the trees showing where they have grown again from the old stumps, when cultivation of the surrounding ground ceased and they were consequently no longer lopped.

One native version of the migration from this neighbourhood is that the streams gradually began to dry up, and the scarcity of water in the dry season forced the people to seek another district. Another man told me that at one time lions became so numerous

In South Central Africa

and killed so many people that the natives left because of this.

Only some five years ago a White Man in camp at Broken Hill was sleeping one night with his door open, when he was awakened by a lioness chewing his hand, which had been hanging over the edge of his bed. He cried out, and someone who was sleeping close by ran in with a gun and shot the beast.

It is always advisable to shut one's door at night, whether in a tent or a hut. I have several times in the morning found fresh footprints of a lion or a leopard, which had walked round the hut during the night. As a rule these beasts will not attack without provocation, but the temptation of a person asleep is very apt to prove too much for them.

Hyenas are fairly common almost everywhere, and it is no uncommon sight to meet a native with part of his cheek missing or with a piece out of his leg. The hyena is a cowardly creature; coming along when the natives are asleep in the bush and the fire has burnt low, he runs in and takes one bite, then clearing off immediately. These animals have extremely strong jaws, which they use for cracking bones. When a lion has finished with its prey, the hyenas which have been waiting a short distance off, watching the lion feeding but not daring to come to close quarters, approach the carcass, and if there is not much meat left, make a meal of the bones, which they crack up and swallow. On a still night, one sometimes hears this cracking of bones a long distance off, which indicates the presence of a

Provisions

hyena. These beasts are sometimes driven by hunger to eat the bones of animals long dead.

Broken Hill is just on the borderland between country that is free from tsetse-fly, and country where no transport of any kind, except human or mechanical, can be used, as neither horses, oxen, mules, donkeys, nor dogs can live in "fly" area.

Broken Hill, although not the terminus of the railway, was till recently the most northerly point on the Cape-to-Cairo line. When the railway to Cairo is recommenced, it will probably branch to the north-eastwards towards Lake Tanganyika, or to some point near there. It is at rail-head that the change is made from modern railway travel to the old primitive method, i.e. with native carriers. Still, travelling in the interior at the present day is very different from what it was in the days of Livingstone, so many are the conveniences that have been invented since his time. Medicines are now made in tabloid form, and all kinds of food can be carried in tins, the latest procurable being frogs' legs and ham and eggs, both ready for use. I should not, however, recommend the latter as an article of diet for the prospective traveller.

It is always best to rely as much as possible on the food of the country: many of the fruits and vegetables that the natives eat make first-rate dishes if cooked properly. The green leaves of the pumpkins make a delicious vegetable, and they can often be obtained when there is not much other green food about. Sweet potatoes can almost always be got,

In South Central Africa

together with fowls and eggs, and as one is always using the rifle, there is not much necessity for canned meat under ordinary circumstances. One does not, of course, eat the native dried fish, which is generally pretty high to our way of thinking. I was once obliged, from scarcity of food, to eat the little grey monkey, but, apart from one's natural aversion to doing this, the flesh was by no means unpleasant; and as the animal is a clean feeder, living almost entirely on fruit and berries, why should it not be good? Some of my natives told me that the flesh was not unlike that of a human being.

Cannibalism is by no means yet extinct, and even in some parts continues almost undiminished, although the people do not eat each other from the same village, but only those whom they capture from a town or village that is hostile to them. They often file their teeth to a point, in order, they say, that they may eat the flesh more easily.

I was told not long ago of a native who was passing through cannibal country with some friends in the Congo Free State. They were all captured, but managed to escape, with the exception of the man in question, who was next day tied naked to a tree, in front of which a large fire was built, and his leg was amputated just below the hip, the wound being seared with a glowing brand from the fire, in order to prevent the subject from bleeding to death. The leg was then cooked and eaten in front of its late owner, who was made to watch the feast before being cooked and eaten himself.

Health of the European

The native does not appear to feel pain to the same extent as does the European. This is noticeable at any large compound, where the medical man often performs operations to which the native appears to pay little attention, but which, if performed on a White Man, would have to be done under the influence of an anæsthetic.

There is a large amount of faith-healing among the natives, and if one has a reputation for a good medicine, a little coloured water or some equally harmless substance will often effect a cure.

If the average White Man takes quinine regularly in moderate quantities during the wet season, and has plenty of exercise, without too much alcoholic liquor, and if in his travels (which necessitate walking) he takes care to have a dry covering at night and a mosquito-curtain in the wet season, there is every chance of his retaining good health.

Much of the ill-health one sees is brought about by being cooped up in a store, getting little or no exercise, and consuming large quantities of alcohol. This, coupled with a fever season, generally ends sooner or later in only one way.

CHAPTER V

Native carriers—The machilla—Ordinary camp retinue—Hunters—Rifles—
The Indian and the Chinaman—Roan antelope—Cutting up the meat—
Evening—The African night.

IF one has much travelling to do in "fly" country, the native carrier is indispensable. It pays in more respects than one to spend a little time in studying this individual's ways and manners. On the start of a journey, or ulendo, as the native in that part of the world calls it, all the carriers who have been engaged roll up in front of one's hut and squat down in a row on the ground. There is always a certain amount of manœuvring as to who is to get the lightest load to carry. One man will have a sick foot, another will have been very hard at work previously, so hard that he has no strength left in him, another may just have heard that his brother is dead, and so on; however, once they are started, they generally forget all about their various complaints.

The White Man travels in what is known as a machilla, if he does not walk. This is a hammock slung on a long pole, with a covering over the top to shade the rider from the sun. In British Central Africa, where there are wide roads throughout much of the country, the machillas have two poles, the hammock being slung from two crossbars between these

Native Carriers

poles. The double-poled machillas are carried by four men, two abreast. Where, however, the paths are only those made and used by natives, there is not room for more than one man to walk at a time, so that only single-pole machillas can be taken.

A team usually consists of twelve to fourteen men, two at a time carrying the machilla for a space of a minute or two ; two other men then take their place, the pole being changed from one man's shoulder to the other's while they are running. It is seldom that the machilla is dropped, except in wet weather, when the ground is slippery, and then the man who slips generally falls first, with the pole on top of him, thus breaking the impact.

In the bush one walks most of the way, only riding towards the end of the day's march, when tired out.

A machilla man considers himself quite above the ordinary carrier, and often has his own servant to carry his kit, which consists of a cooking-pot, etc., a sleeping-mat, and sometimes a blanket. A carrier can seldom afford a servant, and so has to carry his own goods in addition to his load.

The rest of the retinue is made up of a cook, waiter, plate-washer and personal boy, with a capitao, whose business it is to see that the carriers do not lag behind and to boss things generally. Machilla men and servants often remain in the same service for a long time. Some of mine stayed with me all the time I was in the country.

I had two excellent hunters in my machilla team.

In South Central Africa

One was an Angoni, a man who feared nothing, and the other a man from the banks of the Luapula, more cunning in his methods. Separately, these two men were not exactly ideal hunters, but when working together they formed a combination that was hard to beat. I had on several occasions to thank them for my life.

The question of rifles is, as may be supposed, an important one. It pays to find out a good reliable maker, whose rifles are both simple and strong, and to stick to that maker. After many trials, I found the Westley Richards rifles the most satisfactory, and eventually carried nothing but these weapons. I had for a heavy rifle a double .500, firing eighty grains of cordite; as a lighter rifle for ordinary work a .375 Männlicher, holding five cartridges in the magazine; and as a spare weapon a single sliding-block .360.

Many men stick to the sporting .303, but although the penetration is great, which is all that is required for an accurate shot, one often gets only a snap-shot at an animal, when shock counts for a great deal more than penetration, if the bullet does not hit an absolutely vital spot. It is advisable also to carry a shot-gun, as on many of the rivers and small lakes excellent duck-shooting can be obtained, and it is always useful for killing snakes.

In the tsetse-fly country, dogs are of course out of the question, so that it is only by chance that one comes across partridge and pheasant. Guinea-fowl are, however, often met with, and if one is pre-

The Indian and the Chinaman

pared to do a bit of stiff running they are not hard to kill.

Broken Hill is now the most important settlement, after Livingstone, in the western part of Northern Rhodesia. It is the seat of the Magistrate, whose jurisdiction extends over several districts, and also the residence of the Native Commissioner for the Mwomboshi district. There are several stores and a butcher's shop, besides the mine workings and quite a nice little hospital. Where one meets with a White settlement of any sort in Central Africa the cemetery is never wanting, and at Broken Hill a number of graves are to be seen inside the enclosure to the west of the camp.

When the mine was working at full strength there was always plenty going on, such as a cricket-match at the end of the week, and for those who played tennis there were two courts. As, however, little or no work has recently been done at the mine, times are not so lively as they were shortly after the arrival of the railway, when ore was being mined, calcined, and shipped. At that time there were also quite a number of White Women in the camp.

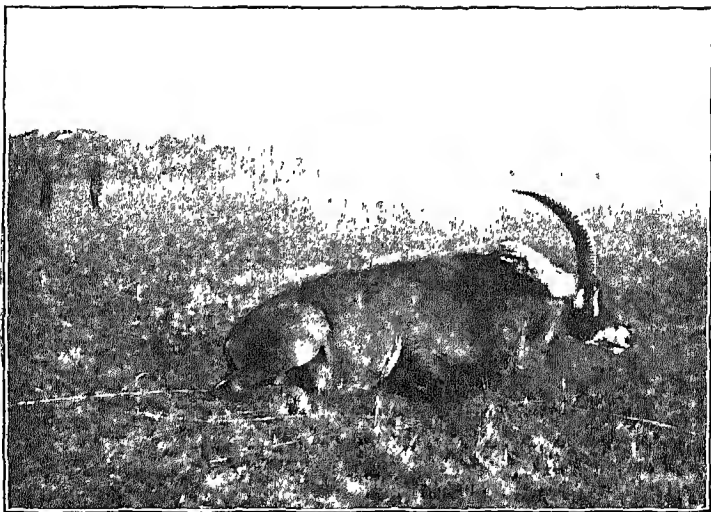
When a White settlement of any size springs up, the Chinaman or the Indian immediately starts a garden to supply vegetables; the Chinaman being the more industrious generally ousts the Indian, if it comes to a case of there being room for only one. The native, as yet, has not mastered the art of growing European vegetables and is simply the labourer, working under the direction of the Chinaman or the Indian.

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Leaving Broken Hill and turning westward, the flat country surrounding the Great Lukanga Swamp is entered upon. Most of the bush country first passed through is fairly thickly covered with trees, from thirty to forty feet high, with here and there open glades or dambos, which serve to carry off the water in the wet season. As the swamp is neared the proportion of timber-covered surface decreases, till on the borders of the swamp there is in many places a great treeless plain extending to the horizon.

Soon after leaving Broken Hill, on coming up to a dambo, the native in front calls out "Nyama," or game. The caravan at once halts, the natives putting down their loads and sitting beside them. One then takes a rifle and approaches as near to the game as possible, in this case a herd of antelope, taking advantage of the cover of the bush or of a large ant-hill or two. One shot brings down a large bull, and as there is a water-hole close by, we camp for the night. Some of the men go out at once and cut up the meat.

It is seldom that the natives of these parts skin an animal completely, as they have none of the uses for the skin of a large animal that the natives or other inhabitants of South Africa have, where it can be used for harness and many other purposes. The joints are therefore cut up with the skin remaining on them, and when the meat has been brought to camp, the natives remove pieces of skin to make sandals with. These they use in the dry season when the ground becomes hot to walk on, or when the grass has been burnt, leaving the



A ROAN ANTELOPE

The African Night

short stumps, which in time penetrate even a native's foot if not protected.

It is always advisable to distribute meat oneself, as if this is left to a native to do, he invariably favours some at the expense of the others.

The camp fires are quickly alight, and almost as soon as the sun has dropped below the horizon it commences to get dark, there being practically no twilight.

There is always a certain amount of doctoring to be done each night, as one man probably has a bad stomach, another has knocked some skin off the end of his toe, and perhaps a third has an ulcer on his leg. I always carried a few of the commoner medicines and dressings, and fixed up the various patients every evening.

Each fire now has its little group squatting round. While one man is stirring the pot, in which the porridge is being cooked, the others are cutting off small pieces of meat and cooking them in the embers. Now and again can be heard the bark of a jackal or the more distant laugh of a hyena, but excepting for that and for the singing of the crickets, the croaking of the frogs if near a swamp, and the never-ending buzz of the mosquito, everything is still.

If camped near a village, some of the men often go and visit it, and if there is a dance in progress, they generally join in.

One by one the natives drop off to sleep, till at last the camp is enveloped in the vast stillness and solitude of the African night.

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It is to this vast territory that Cecil Rhodes used to point in his later years, telling men to go northwards. The statue which has been erected to the founder of the country, in the centre of the town of Bulawayo, has very aptly been so placed that it faces this GREAT NORTHERN LAND.

CHAPTER VI

Nearing the Great Lukanga Swamp—Effect produced by wind on the reeds—Native paths—Swamp canoes—Best position to assume in canoe—Method of propulsion—Native fishermen—An Awatwa village—Construction of swamp dwelling—Fright of natives on seeing a White Man—Mosquitoes—Flour from water-lily roots—Peculiar method of trading—Tendency to intermarry with surrounding tribes—Wild-fowl—Leeches—Disposal of the dead—Animal inhabitants of the swamp.

STILL travelling westwards, one leaves the flat timber-covered ground and emerges on what appears to be a huge plain, dotted here and there with large ant-hills. As the bush is left further behind, the ant-hills become less frequent, and the plain unfolds itself into a huge expanse of shallow water, covered with tall reeds. This is known as the Great Lukanga Swamp, the extent of which may be seen on the map. Standing on an ant-hill near the edge of this reed-covered lake or swamp, it is seen to extend as far as the eye can reach to the horizon, on the north and west. The reeds at hand can be distinguished swaying to and fro in the breeze, but in the distance the effect produced is similar to rollers coming in from the ocean, wave after wave following each other to the edge, where, with the very shallow water and the reed stems becoming stronger and intermixed with tall papyrus and other water grasses, the motion is gradually lost.

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On the south-eastern extremity of the swamp the timber does not approach near the edge, there being a flat, treeless plain, which in the wet season becomes partially flooded ; but as one travels to the westward, the timber-line comes closer to the edge, till in some places they join, parting now and again to form grass-covered plains, dotted with ant-hills, but devoid of scrub of any sort.

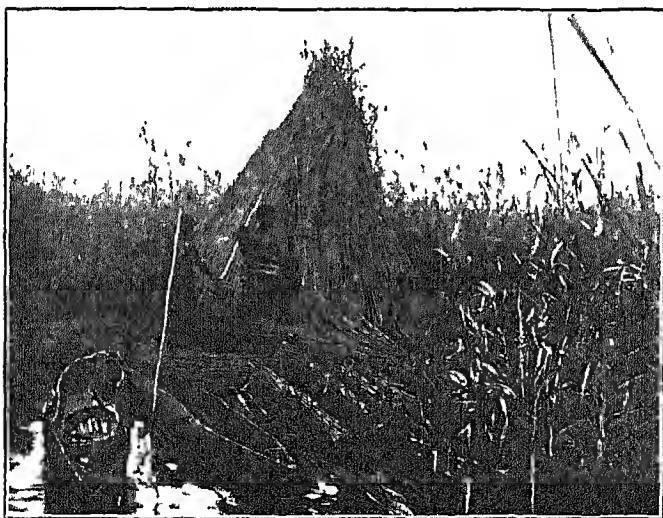
Crossing these plains, native paths are to be seen, leading towards the swamp. On being followed to the reeds, *these become narrow channels of water, some two feet wide*, from which the vegetation has been removed by the constant passage of canoes. Should the inhabitants of the swamp, the Awatwa, happen at the time to be on the mainland, at work in such gardens as some of them have, or in quest of fire-wood, the canoes will be found at the water's edge ; but otherwise it will be necessary to shout till the attention of the people in the nearest swamp village has been attracted, when a canoe will be sent.

The *w* in Awatwa represents a sound which has no counterpart in English. Its nearest approximation can be reached by imagining that one has a hot potato in one's mouth and then trying to pronounce the letter *v*.

A canoe generally holds two persons, both of whom stand upright ; but as the canoes are small and the natives have attained a perfect balance from long practice, it is advisable for a novice to kneel down. This latter position is to be recommended in preference to any other, as, should the canoe upset (which is by no



A "VILLAGE GREEN" IN THE GREAT LUKANGA SWAMP



METHOD OF TYING REEDS INTO BUNDLES FOR MAKING
PLATFORM

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Native Fishermen

means a rare occurrence), one can immediately get free. The canoes are quite narrow at the gunwales, and if one chooses to sit down, by turning sideways it is possible to squeeze the hips between the gunwales and then to turn and sit with the legs straight out in the bottom of the boat. But should one be in the sitting position, which is by far the most comfortable, and should the canoe upset, as has been my experience, the difficulty of getting clear when it is upside down is considerable.

Having embarked, the canoe is propelled along the channel by a native with a long slender pole, which has a small notch cut in the end, so that a single reed may be caught and used as a fulcrum. The end of the pole is generally burnt, in order to make it harder.

The channels are by no means straight, and after winding about for a considerable distance the canoe at last enters a large open space, free from reeds, but with the surface generally sparingly covered with leaves of a kind of water-lily, through which we glide. Dotted about over this open space are to be seen fishermen sitting perfectly motionless in their canoes and poising a long wooden spear ; as the fish pass under them they are transfixed and landed in the canoe. It is only fish of the barbel variety that are caught in this manner ; these abound in the swamp.

The tops of the huts of the village are to be seen projecting out of the reeds round the "village green," each of these huts being built on a separate platform. The method adopted is to cut a quantity of reeds, tie

In South Central Africa

them in bundles about a foot in diameter, and then throw the bundles into one spot until a platform is made sufficiently large on which to build the hut. As there is no current in the swamp, there is no need to anchor the house.

When this platform is completed, it is some twelve feet in diameter and its surface rises about one foot above the surface of the water. The walls of the hut are made of reeds tied loosely into mats, these mats being placed over a conical framework of sticks in such thickness that the structure becomes rainproof. When the walls are completed, a portion of the floor in the centre of the hut, about two feet in diameter, is covered with mud to a thickness of some inches, and on this the family fire is made; without any protection, the fire would soon burn through the floor. As the hut is generally only some nine feet in diameter, and is built slightly to one side of the platform, there remains a space of a few square feet opposite the door on which the natives sit and sun themselves, cure their fish and grind their flour, etc.

Two such houses may be built not more than a few feet apart, and yet rather than make a connection between the two platforms with a few bundles of reeds, the Awatwa prefer to use their canoes.

Many of the villages are situated near the edge of the swamp, and some of them are actually on small rising pieces of ground. The tendency, since the arrival of the White Man, with the consequent immunity now enjoyed from raids by the surrounding tribes, is to come nearer the land.

Mosquitoes

On penetrating further into the swamp and entering the open space in front of the dwellings, the villagers could be seen disappearing in all directions into the reeds, and it was only after waiting for a considerable time at one village that a very old man ventured cautiously back.

I called out to him that I had only come to visit the people and their village, and on seeing that no harm was done to him the rest of the people gradually returned. On being asked why they had run away, they replied that although they had heard of White Men, they had never previously seen one.

The Awatwa are of much the same stature as the natives who inhabit the mainland. They appear to be almost immune from malaria. The Great Lukanga Swamp abounds with all sorts of mosquitoes, there being one kind which is very troublesome all through the daytime, but just before sundown it retires from the field, its place being taken at night by many other varieties. On the edge of the swamp the mosquitoes were so bad, notwithstanding various smoke fires, that as the sun went down one was forced to seek relief inside the mosquito curtain. If one's hand was exposed outside for a very few seconds, it became literally black with mosquitoes.

It is hard to understand how these swamp-dwellers can live through this continuously. It drove all my men into the timber to camp, and many of them were dwellers near some of the large Central African rivers and lakes, where mosquitoes abound, but they said they had never seen such myriads before. A possible

In South Central Africa

explanation is that at night, when the huts are closed up with a fire continually burning, or rather smouldering, the atmosphere becomes too thick even for a mosquito.

The Awatwa make flour in quantity from the bulbous root of a water-lily, which is to be found in great abundance. This root is dried in the sun and ground between two stones, the flour being then cooked with water into a kind of thick porridge.

In more unsettled times a very peculiar method of trading was adopted between these swamp-dwellers and the inhabitants of the mainland. The chief produce of the swamp is fish, for which there is a considerable demand on shore. A party of people would come from an inland village with corn, which they deposited near the edge of the swamp during the daytime; they then returned to their villages, or if they had come from some distance, into the timber where they were camping. During the night the Awatwa, having heard of their arrival, would journey to the edge in their canoes, taking with them dried fish, which they left in exchange for the corn, the latter being taken back with them into the swamp. The inland people then returned in the morning and removed the fish, neither party to the transaction having seen the other.

Until quite recently the swamp people did not intermarry with outsiders, but lately there has been a tendency for men from the mainland to marry wives from the swamp. The swamp men, however, do not appear to have been able to prevail upon the mainland ladies to take up their abode with them.

Wild-fowl

One sees quite small children handling their canoes with wonderful skill, many of these small boats being not more than nine inches across inside.

The Awatwa are not in the habit of travelling far on land, and although a few of the younger and more venturesome men find their way to some of the distant villages and trading stations, the people generally say that they are not able to walk far, as their feet are too soft.

Large flocks of duck and geese of many varieties inhabit the open patches of water, and as they are seldom disturbed by the Awatwa, excellent sport can be obtained. I shot several duck in front of one of the villages, to the great wonder of the people, who, although they had seen a muzzle-loading rifle before, had never seen a shot-gun, and could not understand how a bird could be killed while in the air.

After camp had been pitched, many of my own people went to see "those who live on the water." It is seldom that one's natives trouble themselves after the day's march to go and look at anything which is strange to them. In this case, however, many of them expressed considerable surprise, especially at the circumstance that these swamp dwellers should be able to make their houses on water. There are similar tribes who live on the flat islands of some of the African lakes and on some of the large rivers; a few of the more travelled of my men told me they had seen somewhat similar water people before.

One of my men, an Angoni, who in his own country lived far from any large river and was consequently

In South Central Africa

ignorant of how to manage a canoe, upset himself at some little distance from the edge. The water was, however, not more than three or four feet deep, and he managed to get into the canoe again and started towards the land. When he had travelled perhaps half the distance, on looking at his legs, he perceived several leeches clinging to them; whereupon, giving a shout, he leaped into the water and, splashing through, did not stop running and shouting until he was well inside the timber-line. Natives who have never previously seen a leech have a perfect horror of them, as they think they are a kind of snake.

It is always advisable when travelling in swampy country where there are leeches to tie the bottom of one's trousers tightly around the top of the boots. I have even had leeches enter the boot through one of the eyes in which the laces are threaded.

Perhaps one of the best proofs that the Awatwa are truly a water people is the method they adopt of burying their dead. After the mourning ceremony is over, the body is placed on a small raft of reeds, and a covering of the same material having been placed over it, this strange craft with its burden is towed far into the interior of the swamp, where it is abandoned to nature.

The only antelope that is actually found in the swamp is the sitatunga, or lesser kudu. This animal lives, like the Awatwa, almost entirely in the water, seldom venturing far on dry land. During a very wet season, when the level of the water rises to a height which makes it too deep for the sitatunga in any part of the

Animal Inhabitants of the Swamp

interior of the swamp, these animals are forced to go to the edge, where they are killed by the natives. Nature has provided them with the means of travelling over broken reeds and swamp grasses ; the toes have been prolonged to a length of several inches, so that a bearing surface is produced sufficiently large to support the weight of the body. Should one of these antelopes be startled in the water, he sinks completely below the surface, leaving only the tip of the nose exposed for breathing purposes.

So far as I could ascertain from the inhabitants, crocodiles do not appear to live in the swamp, although several could be seen where the water began to assume motion before entering the lower part of the Lukanga River, which drains the swamp into the Kafue River. It would appear from this that crocodiles do not like a continuously stagnant water with a muddy bottom, even though it contains an abundance of food in the shape of mud-fish.

CHAPTER VII

Arab and Barotse influence—Broken Hill and Sable Antelope path—Trees on the path—Destruction of fruit trees—Cycling experiences—Sitanda's village—Kasonkamola—Elephant hunters—The Walenji—Game pits—Eland—The Eland and the Hare—Native morals—Spirits—Spirit houses—Feeding the spirit—An iguana.

THE ground gradually rises to the southwards from the Great Lukanga Swamp till the watershed between the Upper and Lower Kafue is reached. The eastern part of this watershed-line formed roughly part of the dividing-line between the Arab influence which came from the north and east, with head-quarters at Zanzibar, and the Barotse and other influences, originating in South Africa. Those two zones, as they may be called, were very clearly marked, but as time goes on and the White Man's administration takes the place of that of the native chiefs, the older lines or zones are being gradually eliminated. In the past they left their mark in the different customs and dialects which obtain on either side of this so-called line.

Carrier and mail communication between Broken Hill and the Sable Antelope Mine is maintained by means of a fairly direct path, some hundred and ten miles long. This path passes the Great Lukanga Swamp on its southern edge, as close as is practically

Trees on the Path

possible in the wet season, when much of the adjoining country becomes virtually swamp and impassable. In the dry season the surface of the path is firm and smooth, from the passage of many feet over it.

Once a good path is made, it is used by all the natives for some distance on either side of it. They often prefer to walk a considerable way at right angles to the direction of their goal and join a good path, rather than to cut off the corners by means of a poor or indifferent route.

The path between Broken Hill and the Sable Antelope Mine was constructed about four feet wide, and some weeks after the rains had stopped and the ground had hardened up a little, it afforded an excellent cycle track. One of the chief difficulties is to keep the path free from branches of trees. When a native spies a tree bearing ripe fruit (many kinds of which are to be found in the Central African bush, especially two varieties of the plum species), he lays his bundle on the path, and, taking his axe, cuts down a branch of the fruit tree or, if it is not too large, the fruit tree itself, and dragging it to his bundle or load, eats what fruit he requires. When he has had sufficient, he leaves the branch on the path, where it forms an obstruction, which has to be removed by the first cyclist.

At night-time it is no uncommon occurrence for natives to camp right on the path, making their fires on it also. In the morning there remain unburnt ends of firewood, etc.; these, although forming no obstruction to the foot traveller, are by no means agreeable to the cyclist.

In South Central Africa

One day while riding along a section of this track, on turning a slight bend where the path was bordered on either side by long grass, I came on a leopard lying right in the centre of the road. It was so close that I could not possibly stop, so the only thing to do was to go on, ringing the bell and making as much noise as possible. The leopard crouched for a fraction of a second, ready to spring on me, but evidently the sight of a new animal in the shape of a man on a bicycle was too much for him, as he sprang to one side and disappeared in the grass. A leopard as a rule sneaks away on one's approach, but when wounded or cornered he shows fight and is then extremely dangerous. It will readily be understood that after passing this particular animal I lost no time in putting some space between him and myself.

The cycle path between Sable Antelope and Broken Hill runs for nearly all its length in "fly" country, but there is a section of a few miles near the western end that is free from tsetse-fly, and here the natives keep a few cattle. The chief of this group of villages was named Sitanda, and when passing his village I was often presented with some milk. The milk, however, was usually in the solid state, due to the fact of the vessel never being properly cleaned out and therefore quickly souring each new lot put into it. As we are told nowadays by modern food experts that this is the right form in which to eat milk, no doubt there was some particular germ in the solid milk tending to the prolongation of life. But for myself, I preferred the short life

The Walenji

and milk in its liquid state, and when possible used to send one of my own people with a clean jug or pot in which to receive the milk.

In his day Sitanda was said to have been a good hunter, but not so good as an old chief who lived a few miles further north and who rejoiced in the name of Kasonkamola. This latter was a very old man and had killed many elephants. He had come originally from the Portuguese country, away to the south-east.

At first, for some time after I made his acquaintance, he used to have very little to say to me ; but after I had killed my first elephant, which by good luck did not kill me, he became much more communicative, and would relate to me tales of the days when, to use his words, "elephants were as locusts upon the face of the land."

It is comparatively easy to bring down an elephant with a modern rifle, but with the old-fashioned muzzle-loader the game must have been one which required considerable pluck and skill. The hunters used to approach within a few yards of the elephant before firing, which is, however, not so difficult as it sounds, especially for a native, as an elephant is very near-sighted, and if the wind is in the hunter's favour, the elephant has not much chance of realising his approach.

The tribe that inhabits the country to the south of the Lukanga Swamp is known as the Walenji. The men carry bows and arrows, and poison the latter by wrapping round the shaft, just above the barb, the solidified latex of a vine which grows in the surrounding bush.

In South Central Africa

The bows are made of a special kind of hard wood growing in the neighbourhood, and the arrows of a kind of bamboo or sometimes even of a strong reed. The Walenji also use a spear somewhat between the long, slender throwing-weapon of the Mashakalumbwi and the short stabbing-spear of the Angoni, but it is generally employed at close quarters.

The game pit is used extensively by most native tribes in Central Africa for the capture of animals, especially antelope. The pits are of two distinct types, round and oblong. When a suitable site has been selected near an old ant-hill, where game come to lick the ground for the saline matter it contains, a round pit some four or five feet in diameter and five or six feet in depth is sunk, and the top is covered with twigs and leaves over which soil is sprinkled, to make the surface similar to that which surrounds the pit. In some cases spears with the points projecting upwards are stuck into the ground at the bottom of the pit. A large antelope falling in with its fore-quarters is unable to extricate itself, remaining quite helpless till the native arrives and spears it.

The second kind of game pit, and probably the more common of the two, is some six to eight feet in length and about two or two and a half feet wide at the top. It is sunk to a depth of perhaps five feet, but the sides slope in till the width at the bottom is not more than about six inches. It can easily be seen that an animal falling into a receptacle of this shape becomes more tightly wedged the more it struggles.

Eland

These pits are always put on a path or game run, with the intention of catching the game when it is in motion. In order to make the catch more certain, small hedges or barricades are built at right angles to the direction in which the game travels, openings being left only on runs or paths at the point where there happens to be a pit. These pits are covered over in the same way as the round pits.

I have seen the holding property of the oblong pit very aptly demonstrated in the case of a stout White Man, rather new to the country, who unwittingly walked along one of these inviting paths right through the opening in the barricade. He became wedged in the pit so securely that it required the united efforts of several natives to release him.

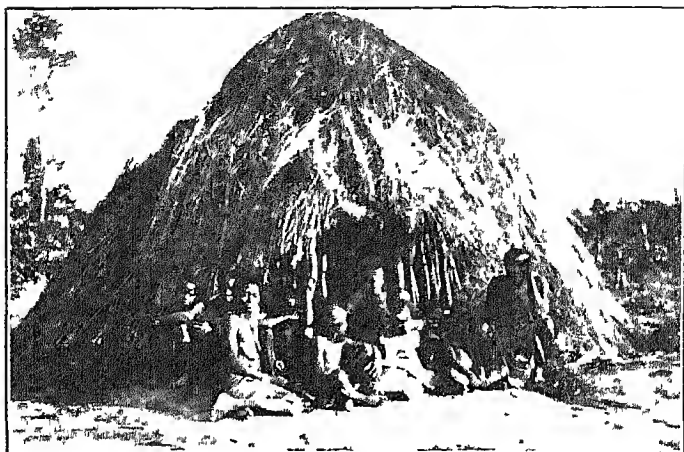
A short distance west of Sitanda's village I shot a very fine bull eland. The eland is the largest of the antelope species, often weighing over half a ton, and thus affording an excellent feed for one's men. The meat is more like beef than that of any other wild animal. Many people imagine that a buffalo should be most like an ox to eat, but my experience of buffalo meat is that it is very tough and often too strong in flavour, unless in the case of a very young animal. The eland is one of the few antelopes from which any fat can be procured. Natives, on account of the scarcity of fat, are extremely fond of it, so that there is often competition to obtain it after an eland has been killed. As has been already mentioned, skins are of no value in Central Africa, although in South Africa they are used for many purposes.

In South Central Africa

Native stories are handed down from generation to generation, and a number are told of the various animals that inhabit the bush. The hare is looked upon in Africa in much the same way as Brer Fox is in our own country.

The story of the eland and the hare runs as follows : The eland had obtained some salt,—a precious commodity in that part of the world,—and the hare wanted it for himself, so he adopted the following procedure. As they were walking along, the hare commenced boasting of his ability to do things which the eland was unable to do, mentioning for one thing that he could eat small stones in large quantities. This he proceeded to exemplify by putting some in his mouth and then pointing to his droppings, which were much the same in shape as the stones he had pretended to swallow, but had taken out again when the eland was not looking.

The eland, not to be outdone, said that he could do the same ; whereupon the hare took him to the bottom of a small, steep rise, and going himself to the top, started a round stone rolling down the hill, and shouted to the eland to open his mouth and catch it. This the eland did, with the result foreseen by the hare, that some of his teeth were knocked out. The hare then came down the hill and suggested that they should sit down and take a rest before having another try. While resting, the hare proposed that they should refresh themselves with a little salt, but this naturally produced a very unpleasant sensation when it came in contact with the eland's raw



A WALENJI FAMILY AND THEIR HUT



A LARGE BULL ELAND

Spirits

gums. The hare immediately said that the salt must be bad and persuaded the eland to give it to him. He then ran away with the salt, having accomplished his desire.

In Central Africa the morals of many of the tribes are somewhat lax. It is a mistake to suppose that uncivilised people are generally very moral, this being more often the exception than otherwise. This laxity as regards the moral code is recognised to such an extent among many of the tribes that, instead of the inheritance passing from father to son, as in European countries, it passes from father to sister's son. In this case there can then be no doubt that the heir has some at least of the family strain in him. In certain tribes, should a brother be the heir, all the wives of the deceased go with the estate. Sometimes the chief wife used to be buried alive with her dead husband, but this practice is not allowed in country under British influence.

When a man dies, his spirit is supposed to return and roam over the land that he used to frequent when alive. Often, when travelling through the country, one comes across some forked sticks, with charms or tufts of grass attached to them, a short distance outside a village, and at the junction of one, two, or three paths, and close to these one or two miniature grass huts. The latter are from eighteen inches to two feet high, and are often exact models of the huts in the village. They are cleaned out at regular intervals, and the surrounding ground is also swept clean, just as in the case of the inhabited houses.

In South Central Africa

For some time after a man's death a small portion of food and a little water or native beer are placed in these houses. The liquid soon evaporates because of the heat, and the rats and mice which always congregate near a village eat up the food. After a little while the natives come along, and looking into the houses, see that the food has been taken and the liquid drunk. They then think that the spirit has visited its house and been refreshed and gone away satisfied. This feeding the spirit is kept up for a considerable period after the man's death—generally longer in the case of an important personage than in that of one of little note.

Once, on diverging a short distance from the path, among grass which was from four to five feet high, and then climbing a small ant-hill, in order the better to get a view of the surrounding country for game, I very nearly trod on an iguana which was lying in the grass.

The iguana got almost as big a fright as I did, and rushed off, nearly upsetting me. I did not happen to see it myself, but one of my natives, who was close at hand, said he thought it was a python. As my shot-gun was handy, I called for it, and we followed the waving grass till we came to a place that was almost bare, and I got near enough to shoot the iguana before it could enter a hole that it was evidently making for. We then discovered its identity. It measured six feet six inches in length and looked nice and fat, but as I had plenty of food I decided not to try any of it. Several tribes of Central Africa consider this animal a great



AN IGUANA



SPIRIT HOUSES

An Iguana

delicacy, but others do not eat it, ranking it with the snake.

I had always been told that one only found an iguana in the neighbourhood of a river, but in this instance the nearest stream was at least two miles from where the reptile was lying.

CHAPTER VIII

Sable Antelope Copper Mine—Zones of native influence—Rumours of native rising—Warning from the magistrate—Preparing to defend the mine—Awemba, old enemies of the Baila—One way of killing the White Man—The main fort—Searchlight—Native stockade—A native blacksmith—Rose bushes and human heads—End of the trouble.

THE Sable Antelope Copper Mine, as already stated, lies to the westward of Broken Hill, at a distance of about 110 miles. The mine itself is situated in a natural clearing in the forest which is almost destitute of vegetation, owing to the nature of the soil. Small scrub and certain kinds of grasses grow on the clearing here and there, but very few of the plants that are found in the surrounding bush. One of the miners made a small garden in the clearing and planted some cabbage and lettuce in it. The lettuce came to maturity, but the plants were only about one-quarter the size they would have been had the soil been normal; in every other respect they were perfect.

Since much of the timber which grew round the clearing has now been cut down for firewood, the contrast is not nearly so marked as it used to be. Imagine travelling for many miles through bush and heavy timber, and suddenly entering a clear place nearly a square mile in area, with no outlet such as a valley

Zones of Native Influence

would have, while all round tall and fairly heavy timber rises up like a wall !

The name "Sable Antelope" originated from the fact that in the early days, soon after the existence of copper was discovered, a herd of sable antelope could often be seen grazing on the clearing in the early morning.

In the mine a considerable amount of work has been done, with the result that small but rich bodies of copper ore have been opened up. The country rock is a limestone, and the ore bodies are probably of thermal origin.

It is a peculiar circumstance that, although the natural water-level is at a depth of about forty feet from the surface, the sulphides come right to the surface ; in fact they outcrop in places, and there is almost no oxidised ore on the property.

The people who live to the south and west of the mine pay tribute to King Lewanika of the Barotse. The people to the north do not recognise the Barotse, and come more or less under the most westerly zone of Arab influence ; but till the advent of the White Man the country just round the Sable Antelope Mine, a little to the northwards, was very much a "no man's" land.

Like the North American Indians, the Central African natives have a remarkable power of transmitting news. I have known instances of a White Man starting to visit me from a place a hundred miles or more away, and while he was still some considerable distance from camp, my natives would tell me that So-and-so would

In South Central Africa

perhaps be in to-morrow ; their information was almost always correct.

When living at the Sable Antelope Mine at the beginning of the dry season of 1907, rumours began to circulate among the blacks that, after the corn had been harvested, there was going to be a rising of all the surrounding natives, having for its object the extermination of the White Man.

My own natives, by which I mean my personal boys and hunters, who were aliens and had been with me for a long time, used to discuss the matter with me, and all agreed in thinking that there was something in the rumours. I myself did not pay very much attention to it beyond writing to head-quarters at Broken Hill for more ammunition.

One Sunday afternoon, however, the acting magistrate from Fort Mumbwa with his assistant cycled to the mine, a distance of a little over thirty miles, and told me that in his opinion matters had reached such a stage that it was advisable to put ourselves in an immediate state of defence, if we were to remain on the mine.

Next morning, accordingly, I called a meeting of all the Europeans on the property, and told them that the magistrate considered that we should all go into Fort Mumbwa, if we had regard to our own safety. The fort had been provisioned for a siege, and all the Europeans in the district excepting ourselves had now moved into it, including some traders who lived about twelve or fourteen miles north of the mine. We debated the question at some length, and I gave my

Preparing to defend the Mine

reasons for advising that we should stay on the property. We could make a very substantial fort from the material that we had on the mine and, further, we had a large quantity of dynamite and a number of rifles, with some thousands of rounds of ammunition. I also argued that, as the natives to the north-east of us had always been under different influences to those on the south-west, there was never much chance of their uniting and fighting together.

In the end, the other White Men on the property decided that the game was not good enough, and that they were not going to stay to be killed by the natives. They also decided against going to Fort Mumbwa, where the chances of holding out against a long siege would be small. Instead, they would go at once into head-quarters at Broken Hill, which was on the railway, and where they would be safe. There were on the mine about six hundred natives, perhaps two hundred of whom were aliens, who came from country many days' journey to the east and north-east. A few of these had been in some of the Central African native regiments, and all were keen and eager for a fight. Having discharged all the local natives, beyond those that were required to carry the other White Men's loads to Broken Hill, I called up the northern and eastern boys, and telling them that we should probably have some fighting to do, requested those whose hearts were not strong or were like water to stand on one side, when they would be paid their money and could get away while there was a chance. But they all to a man decided to stay. Many of them belonged to

In South Central Africa

the Awemba tribe, who live on the other side of Lake Bangweula and are fine fighters.

The Awemba are old enemies of the Mashakalumbwi, or Baila, to the south. Several times during previous years, when we had prospectors out in the south-west, single messengers had been sent to them through Baila country. In many instances when this messenger was an Awemba he was never heard of again, and now his brothers were not slow to remember this, when they saw a chance of getting some of their own back.

I had about ten of my own natives in whom I had the utmost confidence, several of these men having previously saved my life in various ways, while some could use a rifle fairly well.

There were no other Europeans nearer than Fort Mumbwa, and the country was supposed to be in a state of rebellion all round. If I left the mine it would at once be sacked. I am dwelling at some length on the conditions at this particular time because, after matters became normal again, certain people were rather severe in their criticism with regard to arming natives.

With a good supply of arms and ammunition on the mine, it would have been foolish to sit still and try to repel an attack single-handed, so I took the natural course of distributing arms and ammunition to those natives who understood how to handle a rifle. Most of these men had been with me in one or two pretty tight corners before, and had shown up well. I then proceeded to thoroughly fortify the camp.

The Main Fort

A common plan adopted by the natives for killing a White Man is to wait for a very dark night, and then for a number of them to creep up and set a light simultaneously to the thatch of his house all round. As the climate is tropical and the rains torrential, the thatch is naturally made somewhat thick, so that when dry it burns rapidly, making a hot fire.

When the thatch has been lit, the natives go to the doorway and wait with uplifted spears until the occupant, suddenly awakened, must rush out or be burnt alive. On his rushing out, some of the spears are bound to take effect on him. In order to frustrate this plan I hit on the following idea.

Near my dwelling-house, which was a hut with mud and pole sides and a grass roof, I had a blockhouse built of wood, stone and mud, which could not be set fire to. Inside the blockhouse was sunk a small shaft ten feet deep, and beside my bed in the dwelling-house a similar shaft. The bottoms of the two shafts were connected by a small tunnel.

Should I awaken in a hurry and find my roof ablaze, all I had to do was to drop down the shaft close to my bed, run along the tunnel, and climb up inside the blockhouse, which commanded the hut. In the blockhouse I had a few natives with rifles and ammunition, so that any spearmen waiting outside my hut would probably have had an unpleasant surprise.

Near the store and about the centre of the camp the main blockhouse or fort was built, and just under this, and therefore commanded and defended by it, was the stockade in which were camped those natives and their

In South Central Africa

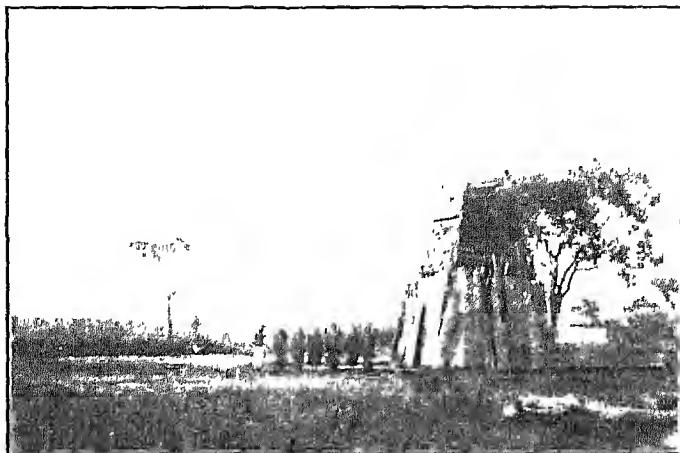
families who were not in the blockhouse. This blockhouse was a two-storied building made of stout two-inch native planks, which would be proof against any spears or copper bullets that might be fired at us from native guns.

The upper story was twelve feet from the ground, and was really the conning tower from which the whole camp could be kept under observation. In several places, at a radius of some hundred yards from the blockhouse, pits were dug and a hundred pounds of dynamite placed in each of them, and on the top of the dynamite a number of stones varying in size from a goose's egg to a cannon-ball. The ground was then nicely smoothed over and the blasting-wire led underground to the electrical firing-machine, which was installed in the conning tower.

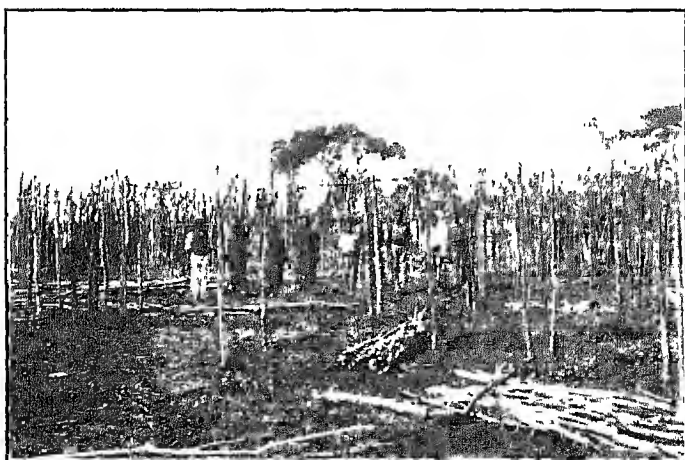
With several such mines, any attacking force of natives in the form of a charging impi would have been somewhat nonplussed by the effect of the explosion, just as they were passing over the particular spot.

I had an acetylene lantern on the mine, and, by altering the reflector and the lenses, managed to rig up quite a serviceable searchlight, which was mounted on the top of the conning tower.

The stockade or native fort was circular in form and some two hundred feet in diameter, its sides being constructed of poles from twelve to fifteen feet high, bound tightly together, while round it a trench five feet wide was sunk, the soil from the trench being piled up on the inside. A number of small huts were built inside, and the remainder of my fighting force brought all



MAIN BLOCKHOUSE OR FORT



THE STOCKADE OR NATIVE FORT

A Native Blacksmith

their goods, belongings, and women-folk into camp within the stockade. Our water supply was in the open at no very great distance, and was commanded by the blockhouse.

It can be seen that such a fort, although affording little or no protection against modern weapons, would be very effective in stopping a rush of savages armed only with spears. The attacking force, too, would probably not feel inclined to linger long, when trying to effect an entrance, in face of a shower of spears from the inside and an occasional bullet from the top of a tower only a few hundred feet distant, to say nothing of a few charges of buckshot from a choke-bore.

When the Awemba build a war stockade, the palisade of poles is often decorated on the top with pieces of wood, sweet potatoes, etc. When war commences, it is the ambition of those who hold the stockade to replace these decorations with human heads.

While all these preparations were going on, I thought that a little bluff on my part might not be out of place, especially as one morning, when out in the bush not far from the mine, I happened to come on a village unawares, and had the good fortune, before being seen, to obtain a photo of a native blacksmith and his assistant hard at work making spears. These spears were to be used to kill the White Men with, and as there was only one in the neighbourhood, and that was myself, I had no doubt that they were for my especial benefit. The master mechanic became rather confused on being asked what particular part of my body the spear was meant for.

In South Central Africa

Lying alongside the forge, in the photograph, could be seen one of the spears which had just been finished.

The bellows of a native forge consist of the skin of a goat which has been removed whole. The neck is tied round a clay pipe which acts as a *tuyère*, and the two back legs are held in the hands of the man who does the blowing, by alternately raising and opening the legs and then closing and pressing them down, thus expelling through the *tuyère* into the fire the skinful of air. Some bellows that I have seen are even fitted with a rude kind of air-valve, and produce a very fair blast.

On returning to camp, I sent for the head-men of the surrounding villages to come in and see me.

In front of my hut were several small rose bushes which had been imported at great trouble, and in order to prevent people from walking over them, there had been arranged round each bush a ring of large white stones.

When the head-men had arrived and had sat down in a semicircle by the door of my office, after passing the time of day to them in their own fashion, I informed them that my rose bushes were not growing well, and that I had asked them to come, in order that we might consult how to make them grow better. For a long time they cogitated, and I could see that they were trying to find out what I was driving at, but could not hit it.

At last I said that they all knew what the preparations that were being taken meant, and that it would be a great pity for them as chiefs to be killed in the ordinary way. This they agreed to. I then suggested

End of the Trouble

that, if they liked, I would show each of them which of the stones round the rose bushes his head could replace; when all the stones had been replaced by their heads, I was sure the roses would flourish much better.

I told them also that on the first signs of any trouble I would send out and fetch their heads in for my rose bushes, as before I went I wanted to be sure that the rose bushes, which were a White Man's medicine tree, would grow well. It appeared from subsequent information that I had been taken quite seriously in the matter, and that our talk of that afternoon had furnished considerable food for discussion in the villages.

When all our preparations were complete, we had a heavy shower of rain in the middle of the dry season. This was taken as an omen, but exactly in what light it was interpreted I was never able to find out. I told them that it was an excellent omen for ourselves, as undoubtedly the rose bushes needed water.

The trouble now was to keep the Awemba in hand. They used to hold a war-dance every evening, and at the end of it they would want to go out and bring in heads. One night, indeed, they went so far that it was only by firing several shots just over their heads and threatening to shoot straight into them that they were induced to return to the stockade.

We got word just about this time that an impi was approaching from the west, under the command of a Barotse general whom some of the natives stated to be the Prime Minister. Very shortly after this we heard that a large force of police with maxims was

In South Central Africa

being pushed forward as quickly as possible towards Mumbwa from the south. This last news seemed to have a very soothing effect on the Baila, who then began to be much less restive.

Sooner or later it is probable that trouble will come, as all through Africa, at one time or another, the various tribes have attempted to throw off the White Man's government, but neither the Barotse nor Baila have yet had a try. The average native sees only a very few White Men, and having a very limited knowledge, or perhaps no knowledge whatever, of the outside world, he cannot be blamed for thinking that he has only to kill off the few that live in the country, to be his own master again.

We heard that the general in command of the impi from the west had one day gone elephant-shooting and been killed by the elephant he was hunting, and that the impi, being now without a commander, had returned. Matters gradually quieted down and in a few weeks resumed their normal course, other White miners being sent out to the property. We had one native on the mine who had been at Cape Town during the South African War, and I sometimes heard him trying to describe to the others the vast number of White Men who could come here if we wanted them. He used to tell of the ships that came up out of the sea, one after the other without end, and from which the White Men used to pour out like locusts.

CHAPTER IX

Silver King Mine—Coal measures—Hot springs—Fig trees—Fishing—Hippopotami—Method of shooting them—Cutting up the meat—The Kafue River—A young hippo—Big-game shooting—The Hippo Mine—Lion country—Msuko fruit—The Lifupa Plains—Multitude of game—Advance of civilisation.

SOME eight miles to the westward of the Sable Antelope Mine is situated the Silver King Mine, which produces very rich copper ore carrying a considerable quantity of silver. The ore is mostly chalcocite or sulphide of copper, and it occurs in the form of pipe-like masses dipping nearly vertically in a limestone and dolomitic formation.

The mine takes its native name Katungwe from a fairly high hill of that name, a little over a mile to the south. Katungwe and its foot-hills contain considerable quantities of iron and manganese ores, but these cannot be worked at a profit for many years to come, owing to the high transportation charges.

The Silver King Mine lies at the bottom of the hills which bound the winding valley of the Upper Kafue on the south. Leaving those hills and travelling towards the river in a north-westerly direction for a distance of about nine miles, some hot springs are reached. Near to and surrounding the springs some of the beds belonging to the coal measures occur, and

In South Central Africa

among the latter there are several small seams of coal. The coal seams so far located are, however, too small to be worked.

There are evidences of intrusive action, and it is along the line of this disturbance that the springs are found. There are two main vents and a number of smaller ones, all situated within a radius of several hundred feet. The springs form the source of a stream which enters the Kafue River after flowing a distance of about a mile. The water at a point where it issues from the ground registers a temperature of 175° Fahrenheit.

A short distance down the stream, where the water has cooled a little, a number of small fish are to be seen swimming about. These attain a length of three or four inches and are in appearance somewhat like a perch. The natives said that the fish sometimes went up close to the vents, but this one would think would be rather too warm for them. I waited for a time, in order to verify the statement, and at last caught some fish, by means of a small net at the end of a bamboo pole, at the point nearest to the spring outlet that I personally saw them approach to. The water was far too hot here for a native to enter without scalding himself, and on taking the temperature it proved to be 135° F.

The water had a strong smell of sulphuretted hydrogen, but upon analysis was found to contain no remarkable quantity of any salt in solution. The mud in the vicinity of the springs being warm, it forms a great attraction as a wallow for the wart-hog, who

Fishing

makes ample use of it. I have no doubt that were these springs accessible we would have a fashionable hot-mud cure or similar institution springing up, and should discover some excellent medicinal properties in the water or mud. On a cold morning the cloud of steam which rises from the springs can be seen for many miles.

There are several large fig trees near the hot springs, but like most wild trees of their kind in South Africa they afford very little edible fruit. Figs there are in plenty, but they are very small, and if they in any way approach ripeness, are almost invariably found to contain ants or grubs or some other kind of insect, which have generally made the best of their opportunities and eaten all the meat.

Following the stream down to the Kafue, just before the confluence, it widens out and forms a large still pool, and here lie quantities of fish—bream, barbel, and mud-sucker. All live in this particular pool, and my natives used always to look forward to a good feed of fish when we camped near this place for the night.

By fishing with a hook one might succeed in catching sufficient for one's own supper, but we used to adopt a more certain though less sportsmanlike method of filling the pot, viz. by what is commonly known as a "Nobel's hook." Only bream rise to the surface on being shot, so that both mud-sucker and barbel have to be landed by diving for them, in which exercise some of the natives are great adepts. Although there are crocodiles in the vicinity, there

In South Central Africa

is little to be feared from these brutes for some time after a charge has been fired.

It is easy for a person sitting in an arm-chair at home, with a fishmonger's shop just round the corner, to criticise this method, but when one arrives at a big river after having been in the bush for a long time, the thought of fresh fish for supper becomes rather tempting; and this being shared by one's natives, especially the lake boys, scruples soon vanish, especially after taking into consideration that the next White Man to visit the spot will probably be oneself some months later, and that little harm is being done beyond robbing the crocodiles.

The Kafue abounds in places with hippopotami, but as the reeds extend for some distance into the water for most of the way along the banks, and round many of the favourite pools, it is very often extremely hard to get a shot from the land.

A small native canoe is a very unstable vessel to shoot from with a heavy rifle, so I used to adopt the plan of getting two canoes of about the same size and nailing two or three boards across, thus forming a platform on which one could stand upright; the stability of the craft is in this way greatly improved. In such a boat one can travel quite speedily, as with a paddler at either end of both canoes the propelling power is considerable.

On one occasion, shortly after putting out, we came upon a school of hippo, and by standing up on the platform I was able to get a good shot, killing an animal at once. When a hippo is mortally



THREE KATUL BREAM



WILDEBEEST

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Hippopotami

wounded, it rises several times pretty high out of the water and then turns over, showing its legs above the surface. This is an almost certain sign that the animal is nearly dead. Although they are of such large bulk, the mark at which to aim is quite the reverse. To kill the animal it is necessary to shoot through the brain, and as the brain is small and the hippo often puts only the tip of his nose above the water for a few seconds at a time, one must be prepared to shoot both quickly and accurately. When killed the body sinks to the bottom, and it is a matter of some hours before sufficient gas is generated internally to refloat the carcass.

After having shot the hippo in question, we went down stream and camped at the first shallows, knowing that this would be where the carcass would strand. After camp had been pitched and everything prepared, the body was seen to be floating slowly down, when the whole camp of sixty or seventy natives turned out, and by means of ropes, much noise, pushing and pulling, rolled the body to the bank, where butchering operations commenced.

The hide is altogether too tough to be cut with a knife, so an axe is used. Strips are often cut off along the back, parallel to the backbone, each some two inches wide. These, when dry, are pared down and used, among other purposes, for administering correction to the erring native.

The body of a large hippopotamus contains many pounds of fat, and I used to have some of this boiled down and put into cans for my own use. Prepared in

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this way it is difficult to distinguish it from lard ; in fact, it is greatly preferable to the latter, as the hippo is a clean-feeding animal. What is more, one never knows what the substance emanating from a large American canning establishment under the name of prime lard contains, in addition to the fat of the hog.

When the surrounding villages hear that a hippo has been killed, they immediately come in and bring a present with them. Needless to say, this is simply a ruse. All natives like fresh hide, and although it appears to us too tough to eat, it is not long before there is no hide left.

The two large teeth in the bottom jaw make good trophies. These are sometimes so large that two men can be placed close together, and the two teeth, which are semicircular in form, meet at both ends on being put round them.

From the confluence of the hot springs and the Kafue to the Hippo Mine, which is situated half a mile from the river-bank, is a distance of about thirty miles by water, down-stream. The Kafue River is wide and slow-flowing from the hot springs for some miles down, and there are few things more enjoyable than to sit in a large canoe, comfortably padded with a tent and other baggage, and be paddled slowly along.

On the south bank the country is flat, and as the grass had been burnt, one could catch a glimpse every now and again between the bunches of reeds of a herd of puku feeding on the flats. On the northern bank

Big-game Shooting

the ground rises more abruptly and is wooded down to the river's edge. Now and then could be seen some grey monkeys in the trees and sometimes baboons up among the rocks. One could also watch the carriers trudging along the bank, as although we were able to take most of the loads in the canoe, which was built after the Canadian type and was supposed to carry a ton, there was no room to stow any more natives.

In places the river would measure five to six hundred yards in width, narrowing down a little further on to half that size. After some miles of smooth water the top of a series of rapids is reached. These rapids extend with a few breaks for a distance of eighty miles and form the division between the Upper and Lower Kafue River.

In broken water which was not deep enough to allow of his doubling back under the boat, we came on a young hippo, and for more than a mile kept him going in front of us. At last, when we were gaining rapidly on him, he took to the bank and, crossing a neck of land round which the river flowed, got into a large pool on the other side and vanished.

One does not often come upon a hippopotamus out of the water in the daytime, but after it gets dusk they come out and graze on the river-banks, often remaining out of water all night.

Big-game shooting is certainly very fascinating for a little while, but the novelty soon wears off, and when it becomes necessary to shoot such helpless large creatures as antelope, hippo, zebra, etc., to fill the

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pot day after day, the attractions offered by the average shooting trip do not amount to much to one who has had to do this for some years as a means of obtaining food. There is always a certain amount of fun, however, with such animals as buffalo, elephant, and lion. To get the full benefit of such sport one must be single-handed and on foot. In an open country, where lion are hunted on horseback, the chances against the lion are very great. The average man who goes on a shooting trip is attended by a guide or hunter, who carries a rifle, and perhaps also by a friend. In the event of his making a bad shot and the animal charging, there is a chance that one of his companions will bring the animal down. To appreciate the possibilities of an elephant hunt, let a man take his rifle and, attended by two natives armed only with spears, let him seek the elephant on foot in bush or bamboo country. The same applies to buffalo. I know of no better test for one's nerves than to face a charging buffalo, knowing that you must not shoot till he is close upon you, and that the shot must then be fatal. Under such conditions as these the game is more equal, and although with a modern rifle the odds are against the animal, to the hunter there is always enough risk to give an interest to the proceedings.

We travelled down the river without further event until the Hippo Mine was reached, some few miles south of the confluence of the Lunga and Kafue. The country rock is of a slaty nature, and the ore is found as a vein. It is composed chiefly of copper

Lion Country

and iron pyrites, the vein also carrying quartz, fluor-spar, and calcite. A fair amount of work has been done—sufficient to show quite a promising little mine, but its position right in the heart of the fly country effectually puts an end to all ox transport, and the cost of building a suitable road for ore transport by traction-engine would be as much as that of a railway.

On the north-west side of the river from the Hippo Mine and round the mine itself is a very favourite spot for lions. It is quite the exception to pass a night in that neighbourhood without being awakened either in the dark hours or towards dawn by lions roaring. When camped in the bush near this place, the traveller hears before daylight a lion roar on one side of the camp, to be answered from the other side, the chorus sometimes coming a little nearer and then receding. There is nothing that I know more awe-inspiring and terrifying than the roar of a lion close at hand in the darkness. When it is heard, the natives get up and pile more wood on their fires, and as it continues, sit up and edge nearer and nearer to their master's tent. The presence of the White Man and possibly the gun inside affords them a sense of security, but on a dark night it is quite hopeless to attempt to shoot a lion, locating him by the sound of his roar. I used often to put my head under the blanket and try to shut out the sound. It may seem cowardly to say so, but there are few things that I dread more than to hear a lion roar close at hand at night, even although the chance of his attempting an attack is very remote. Cases of

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natives being killed and eaten by lions, although not common in the Lower Lunga neighbourhood, are by no means what one might call rare.

Crossing the Kafue and travelling in a north-westerly direction over a country which is for the most part flat and sandy, the divide between the basins of the Zam-besi and Kafue rivers is reached after some days' travel.

Over a large part of Africa south of the Equator and above a certain altitude grows a tree known by several names—the mahobohobo in South Africa and the msuko in Central Africa—which bears a fruit somewhat like a medlar in shape, and containing four stones. When ripe the fruit falls to the ground, and is eaten by the natives and all the wild animals, from the hyena to the zebra. Good specimens are as large as a small apple, and have a flavour peculiar to themselves. The sandy soil near the Lifupa River, west of the Lunga, appears to be particularly suited to the requirements of this tree, so much so that I have never in any part of Africa seen so large a crop of fine fruit; in fact, I camped one day, doing only a short march, in order that the natives might have a chance of filling themselves with it.

Some distance from its mouth the Lifupa River widens out, and all trace of its course is lost on a vast treeless plain which, like other similar stretches of country, becomes almost a shallow lake during the wet weather. This plain is far away from the beaten track, so far as White Men are concerned, and here I have seen game as I have read of it in books by old

Multitude of Game

hunters and travellers in South Africa, before the country was settled by Europeans.

The plain is in places dotted with large ant-hills and grows a luxuriant crop of grass, which would be magnificent feed for cattle, were it not that it is in the heart of the tsetse-fly country. Blue wildebeeste or gnu, zebra and antelope of various kinds roam over the plain in huge herds. So unaccustomed were these animals to a rifle or a White Man, that I remember in particular one large herd of zebra, with a few hartebeeste scattered among them, in which there must have been at least several hundred animals, that simply parted in the middle on our approach, yielding us a path perhaps one hundred feet wide. Through this the whole caravan passed, the animals standing looking at us as we wended our way through. I could have hit almost any animal I wanted with a stone, but as we had plenty of meat there was no object in shooting. After we had passed, looking back from a little distance further on, the herd had closed up again and continued grazing.

The wildebeeste have a peculiar action when they run, holding their tails straight up in the air and travelling with a motion somewhat between the canter of a horse and the trot of a bullock. They are extremely game animals, and should you wound one of them without bringing him down, he will invariably charge. As he is by no means clumsy on his feet, you must be fairly quick to keep out of the way of his sharp and formidable horns.

I have stood on the top of an ant-hill on the Lifupa

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Plains, and have been unable to see any timber on three sides of the horizon. Near at hand one could distinguish the herds of different kinds of game grazing, each herd containing from one to five hundred animals. As the eye wandered further afield and the outlines became gradually less sharp, the herds merged into dark brown or black dots, until at last they could not be distinguished from the plain on which they grazed. This gives some idea of the quantity of wild life that must at one time have roamed over the African veldt. Few such places remain, even in British East Africa, and such sights are now rare. It is probable, however, that the Lifupa Plains will for many a day continue to be the haunt of these great herds, as nature has provided a very effectual barrier, both as regards geographical position and in surrounding the plains with many miles of tsetse country.

When the White Man first came to Southern Rhodesia, only a few years ago, vast numbers of game roamed over the undulating plains of Matabeleland and the more hilly grass pastures of Mashonaland, but now even a small herd is seldom seen. The place of the game has been taken by herds of cattle, confined by wire fences. Where one could travel for miles without seeing a human being, homesteads are now springing up, and a land which supported an untold number of wild animals is being made to yield her increase in another form, whether for ultimate good or otherwise remains to be seen. The sense of freedom one experienced when travelling north day after day among the wild life has passed. In place of it we

Advance of Civilisation

have the increasing prosperity of the community ; but although the advantages are nearly all with the latter, it is hard to relinquish the old conditions without a sigh, when one gazes over the landscape, and in imagination the fences fade away, the waggon roads disappear, the farmhouses become collections of little grass huts, and the cattle assume different shapes and forms.

CHAPTER X

Kasempa—Native Commissioner shot at—Slave traders—Vine rubber—The Kaonde method of hunting elephants—Male and female bullets—Native blast furnaces—Copper implements—Spirit inhabits a pool—Kamwendo—Floating bog surface—Kapopo—Native Commissioners.

THE district embracing most of the country through which the Lunga and Lifupa rivers flow is known as Kasempa, taking its name from a chief near whose village the magistrate lives. The natives of this district are for the most part a tribe known as the Kaonde, a wild-looking race of people, the men wearing their hair fairly long, which adds to their peculiar appearance. The Kaonde language is quite unlike Walenji or Walamba, both of which are spoken eastward of the Lunga; in fact, so different that Walamba people who have been with me have been quite unable to understand what the local people said, on arriving at some of the more westerly of the Kaonde villages.

The north-western portion of the Kasempa district is still pretty wild. Not very long ago the Native Commissioner of that part had occasion to visit some villages near the frontier, where probably few, if any, White Men had been before. He had a very narrow escape, as, on nearing the outer stockade at one of the villages, he was met by a volley from muzzle-loaders,

Vine Rubber

with the result that he and some of his men were hit, his own arm being badly broken. Some of the men managed to carry him for an eight days' journey to a place where he was able to get medical attendance, and he eventually recovered; but it can be imagined that the eight days spent under such conditions were by no means pleasant, especially as the bullets used are mostly copper.

Two Portuguese slave traders were captured just about this time and sent down-country for trial. They belonged to Portuguese Angolaland or West Africa. In many parts of that country there are no tsetse, and consequently oxen can live, which fact the Portuguese take advantage of by using these animals for riding on.

The slave trade is still carried on in parts of the country to a considerable extent, but it has very materially diminished from what it was a few years ago.

Many parts of this country are covered with undergrowth so thick that it is impossible to force a passage through it. Native paths are few and far between, so that, failing one of these, the traveller is forced to make use of elephant and buffalo paths. There are large quantities of vine rubber in the bush, but the natives are very wasteful in its collection, cutting down the whole vine or pulling it up bodily by the roots. If this method is persisted in, the vine must soon become extinct. The Government are endeavouring to put a stop to this wholesale destruction, and permission to collect rubber is now only granted to a responsible

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person who undertakes not to completely destroy the vines.

The Kaonde people came from the north, probably from a country that is now included in the Congo Free State. Many of them are good hunters, but they employ a very barbarous method of killing elephant. They have possessed guns for some time, obtained from the West Coast traders, and in these they use copper bullets; but each charge, to be effective, must contain both a male and a female bullet. The male bullet is a solid sphere of copper, and the female bullet a cylinder of solid copper of the same diameter, but with its main axis about twice as long as the diameter of the sphere. A Kaonde hunter having loaded his gun, endeavours to creep up behind an elephant as near to it as possible, and he then shoots it from behind, right in the knee-joint of the hind-leg. Time being no object, he now settles down to follow the elephant, which must fall sooner or later (in perhaps a week or a month), owing to suppuration in the joint, from poisoning produced by the copper bullet. What pain this must give to the animal can well be imagined.

In the northern part of the Kaonde country there are several copper-mines which have been worked intermittently by the natives for many years. Small blast furnaces are built, with a shaft about three feet high; charcoal is used as fuel, and the blast is supplied through clay *tuyères* attached to goatskins. They produce quite a good grade of copper, but with such a crude method the slag loss is very considerable.

Copper Implements

The women wear a quantity of copper ornaments, chiefly as bangles round their arms and legs. These are made from rods of copper, a quarter of an inch or a little more in diameter. The rods are cast in a most peculiar manner. A long hollow reed is set up on end and covered with clay, and the molten copper is poured into it at the top. When it has cooled, the reed and clay are broken away, and a fairly uniform rod of metal is left, lengths being cut from the bar as required.

In the Kaonde country one sees hoes and spears of copper, and now and again a copper axe, although the latter are not common. It is said that these people have a method of tempering copper. As one travels north-eastwards towards the Katanga copper-fields in the Congo Free State, copper implements are often to be met with.

Kasempa station, where the magistrate and a company of police in charge of a White officer are quartered, includes a fort, and is built at the top of some rising ground which slopes gradually up from the River Lifupa. It is a good as well as a pretty site, and commands a very nice if somewhat limited view of the surrounding country.

Eastwards from Kasempa the Lunga and Lifupa rivers are two good days' journey apart, the country between them being intersected by numerous small streams flowing southward, to join one or other of the two rivers. On arriving at the Lunga we camped on its bank, and I managed to shoot a hippo, which sank in a large pool and, rising later, continued

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to float in the middle, there being no current to take it down. By this time many villagers had arrived, and were discussing ways and means of getting the hippo to shore. It appeared that there were no canoes at hand and, worse still, that that particular pool was inhabited by a spirit who would deal out certain death to any person venturing into the water. I saw that it was quite useless to try to persuade any of the natives to go in with a rope, so after exploding a charge of dynamite in the pool, to frighten away the crocodiles, I took the rope, and paying no attention to their entreaties that I should not venture in, swam out and tied the rope round one of the hippo's legs. On returning to the shore, apparently much to everyone's surprise, the villagers all came up and gave me a salute that is reserved for special occasions only. My own men afterwards explained that the spirit had probably never seen a White Man before, and was therefore afraid to touch me.

The hippo was at once towed in and cut up. While this was going on the old chief of the village came along and, sitting down close beside me, told me all about the spirit. It appeared from what he said that it had often been seen, and any person who chose to wait until a certain phase of the moon occurred, and then threw a particular kind of bead into the water, would be rewarded by seeing the spirit rise to the top of the pool. I happened to have some of the beads in question with me, and as I had to remain in the district a few days in order to examine some copper

Spirit inhabits a Pool

finds, I gave them to one of my men, and told him to go with the chief and throw them in as directed, and then to tell me what the spirit looked like. But although they remained at the pool most of the time I was in the neighbourhood, the spirit never favoured them by appearing. I explained the circumstance by saying that my spirit had entered the pool and had destroyed its previous occupant.

In this locality, when a person dies, the house in which the death takes place is at once abandoned and never reoccupied. When people become old, they are simply left in a hut to die. We passed through a village that had been recently deserted, and one of my men looked into a hut and saw an old woman who was suffering from some disease and who had just been left to die. I told him to give her some food, but he would not enter the hut. I therefore went myself, but found that she was almost unconscious and that we could do absolutely nothing for her. Her people would return and bury her when she was dead.

There is a tract of land between the Lunga and Luswishi rivers that is almost uninhabited, and this constitutes the dividing-line between the Kaonde and the Walamba, the latter being the most westerly people that the Arabs reached. Remains of Arab settlements are to be seen in Walamba country. Many Arabs married native wives and settled down, forming a village which gradually grew into small settlements. Such a colony is to be found on the Luswishi River, ten miles or so above its mouth. Here the Swahili

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language is still spoken, or rather a dialect that contains mostly Swahili words and is known locally as Chilungwana. European potatoes were obtained at this village, which took its name Kamwendo from the chief who founded it. These people also grow rice and build square houses.

Nearly all natives who can claim any Arab extraction profess the Mohammedan religion, although few of them are strict observers of it. I have, however, met very strict Mohammedans in the interior. Once, when on a small mine, I had two Mohammedan engine-drivers. All the natives used to receive their day's rations in the morning from the store, which was then closed, and no more native food was issued till the next day. These two men lived in the same hut, not very far from their engine, and were one day cooking their day's food, which was rice, in a pot over a small fire just outside the hut. Passing by, on my way to the engine-room, my shadow happened to pass over the pot in which the food was cooking. This in their eyes was quite enough to defile it, as I was only an infidel, a dog of an unbeliever, so the food was thrown out, although they knew quite well that no more would be procurable until the following day.

Near Kamwendo's village, alongside of rivers which are very slow-flowing owing to the country being flat, there are a number of grassy plains. In many places these are like a bog, and they never dry up entirely, even during the dry season, although the surface is covered with floating vegetation, which from close at hand has the appearance of solid ground.

Floating Bog Surface

The floating covering is composed of grassy plants, the roots of which become matted together and reach down into the mud below. There are often six or eight feet of water above the mud, which is slimy and black, with a very offensive smell. It is necessary at times to cross such places, and if the men have heavy loads the operation is one of considerable danger. In order to cross successfully the men must spread out and never walk close together, as the joint weight of two men would submerge the surface. It is also necessary to keep moving all the time, as with each step the carpet begins to sink. Should one be unlucky enough to break through, it is no easy matter to extricate oneself from the entangling roots, and one stands quite a good chance of being drowned. These plains are inhabited by herds of puku and red lechwi, the latter an extremely graceful species of antelope. Both species will take to the water on very little provocation and swim for considerable distances.

With most varieties of antelope that inhabit an open and at some seasons of the year partly water-covered plain, the number of females greatly exceeds that of the males, and only the males have horns; whereas, in the case of antelope which live in bush- or timber-covered country, the males and females are much more equal in number, and both sexes have horns.

Travelling still further to the north-eastward, the next village of importance is that of Kapopos. He is a chief of some standing, and has built

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his village on a preconceived plan, thus showing Arab extraction. On my last visit he was building a new house for himself, which contained, besides others, seven separate rooms, rather small and much like horse-boxes, for his seven wives. On the bank of the Kafue and about half a mile from the village is a trading station owned by a Mr. Ulman, and here I was always sure of a warm welcome. "Tambalika," as Ulman is known to the natives, has done a lot of big-game shooting in his time, having been in the country since the very early days, and before it was under any settled government. Much of the rubber and ivory that left the country in those days passed through his hands, and should one strike him in a reminiscent mood, many are the interesting stories he has to tell of things which will otherwise never be recorded.

Kapopo was the point where the transport route between Broken Hill and Kansanshi Mine crossed the Kafue, and before the days of the railway extension into the Congo Free State there was considerable traffic along this road. The store at Kapopo was a sort of half-way house for White Men who had to make the journey.

I used to strike Kapopo sometimes when returning from a long journey from the west. Not having heard a word of English spoken for many days previously, it was a pleasant change to sit and talk to another White Man after the evening meal. I do not mean from this that life in the bush becomes tiresome; indeed, if one has a taste for it, such a life never

Native Commissioners

becomes monotonous. Still, it is interesting at times to get a little news of what is happening in the outside world.

Kapopo is in the district of N'dola, which some years ago used to be in charge of a Commissioner, known as Chilupula; when on his rounds he would sometimes hold his court at Kapopo. It is remarkable how a few personalities will dominate such a country, and how work such as a Native Commissioner's will quickly show up a strong man or otherwise. Speaking purely from a native point of view, in travelling over the country covered by my map, two names used to stand out above all the rest (and the native is seldom wrong in his summing up of the White Man). One of these was Chilupula, and the other Yakobo. When it is remembered that we are now speaking of a country nearly as large as England, and which had at that time, i.e. before the arrival of the railway, a population of less than one hundred Whites, the influence of those at the head of native affairs cannot be overestimated. In dealing with the natives it is a mistake to employ an interpreter, as in one way or another this man will sooner or later translate so as to suit himself. The effect is made very patent to an outsider, as natives will sometimes tell one that "So-and-so," naming the interpreter, is the man who really decides the case.

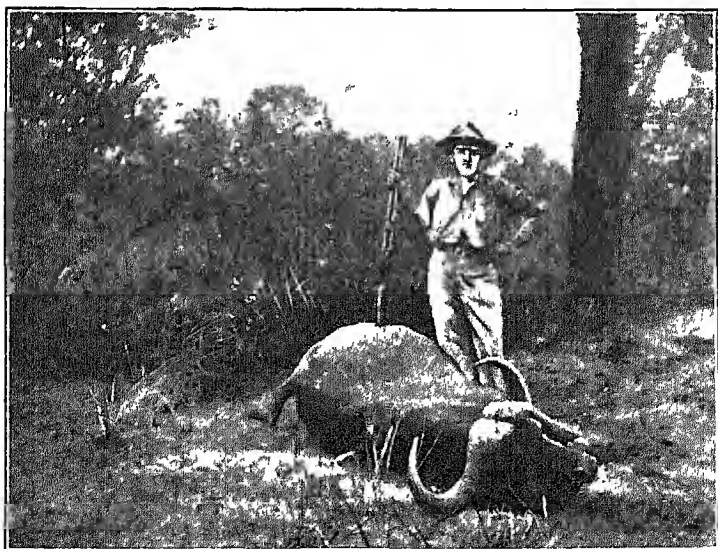
It is not unusual among some of those in charge of native affairs to attempt to exalt themselves in the eyes of the native, to the depreciation of the other Europeans in the district. This has, however, the

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opposite effect to that desired, for, as already stated, the native is a pretty shrewd individual and sees much more easily than might be imagined through little games of this sort.



A GOOD BAG



A LARGE BULL BUFFALO

CHAPTER XI

Kashiwa Lake—Buffalo—Following a wounded animal—Charged in the bush—Charged again in the open country—How to shoot a charging buffalo—The Kafulafuta Mission Station—A narrow escape—A lion—A bad shot—Natives climb surrounding trees—Charlie—Kombarumi—Killing the lion's spirit.

THE country along the banks of the Upper Kafue is fertile and could support a very much larger population than now exists. The land is well wooded, thus affording a good supply of timber for burning, and so yielding ash, which constitutes the only form of manure that the natives ever apply to their gardens.

Some eight miles to the eastward of Kapopo there is a typical limestone lake. The surface of the water is considerably below the level of the surrounding country, and the banks are almost perpendicular cliffs of limestone. The water is very deep and beautifully clear, and it has a deep blue colour.

The lake, known locally as Kashiwa, has a rather peculiar approach. Travelling over a flat and rather dry country, with alternating open spaces and bunches of timber, what appears to be a much denser piece of timber than the rest comes into view. From a distance tall green trees can be seen inside it, such as grow near a large river. The outside fringe is much the same as the surrounding bush, but on penetrating

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a little towards the centre the undergrowth becomes very thick, and one has to seek a path in order to reach the inside. The fringe or border of bush and timber is perhaps a hundred yards wide, and when this has been passed Kashiwa suddenly bursts into view. The lake itself is about a quarter of a square mile in area. When one climbs down to the water's edge the unnatural stillness of the place is very apparent. Though in the evening large flocks of duck and geese resort to it, in the daytime there is no life visible, and the prison-like cliffs, capped by the surrounding belt of tall timber interlaced with vines, effectually shut out all sounds from the bush. The natives regard the lake as haunted and avoid it.

The level of the water is very different in the dry and the wet seasons. When I visited the lake about the middle of the dry weather, the surface was some ten feet below high-water mark.

We left Kashiwa early next morning, and after entering a large tract of pretty heavy bush and proceeding along for a distance of about a mile, with the carriers close at hand, all chattering and laughing as they went, we got fairly close to a large herd of buffalo. Owing to the noise, however, the animals took fright, and I was unable to approach close enough to get a shot. As we were short of meat, I decided to follow them a little way, telling the capitao to go on with the carriers to a small stream some distance ahead, where I had camped before, and to wait there until I arrived. Setting off with four machilla men, who included my hunters, we started to spoor the herd, and after

Buffalo

following a few miles we came up with them in a country of small close bush. The herd was restless, and now and again a bull would grunt and the whole herd would move on a little way ; they evidently knew that there was danger near. After stalking them for about a quarter of an hour and trying through the thick bush to pick out an animal with a good head, I fixed on one that was close at hand, fired, and dropped him, when the whole herd of about eighty buffalo swerved round and, not seeing us, galloped right towards where we were standing. Chimangemange called out to run for a small patch of less thick bush a little way to the left, which we did, or we should have been trampled to death. As it was, we only got clear in time, when the whole herd thundered over the spot where we had been standing. I turned round and fired at what appeared to be one of the largest animals, but the beast did not drop. As soon as the herd had gone we started to follow it up, and one of the men picked up a spoor, showing here and there a drop of blood. Very soon this single track parted from that of the rest of the herd and went off in a direction by itself.

Now began the fight. A wounded buffalo, besides being one of the most dangerous of animals, is also one of the most cunning. A very favourite move is to go with the wind for some distance and then make a semi-circle to the one side or the other, generally to that side where the bush is thickest, thus coming back and waiting noiselessly a few yards from its own track in a clump of bushes or long grass. The animal now

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holds the advantage, as it has the wind, and can watch its previous track and therefore also anyone who may be following it. One must always remember this and take every possible precaution, though this is often very difficult in thick bush; in fairly open country there is not nearly so much danger. It is quite an exercise for the nerves to have to go steadily on, keeping a good look-out on the ground, so that the spoor is not lost, and trying at the same time to watch both sides of the bush, never knowing when you may be charged.

The first intimation of the proximity of the buffalo we were hunting was a crash of breaking bush. The animal had luckily misjudged its time and distance slightly, coming out a little behind me, and giving just time for Chimangemange and myself to jump on in front, while the men behind fell back. The whole manœuvre was executed so quickly that I was unable to get a second shot.

The buffalo having missed us in thick bush, evidently decided to adopt different tactics, and we found on following its tracks with renewed caution that it had made for more open country, also that it was losing more blood and so would probably not travel far. After following for about half a mile we came to more open country still, but the surface was dotted here and there with large ant-hills, covered with grass from six to eight feet high and very thick. The buffalo had gone past several of these and, circling back, had climbed into one about a hundred feet from its old track.

How to shoot a charging Buffalo

When we reached the open we had probably become more careless, for after going on a short distance the first thing I realised was that the buffalo was about fifty feet away, coming straight for me like an express train. It had evidently been shot somewhere near the lungs, as it was blowing out a cloud of blood-coloured foam, with which it was also covered, and this for the moment gave it a very terrible appearance. Now, it is of little use firing at a charging buffalo when it is galloping towards you and looking straight ahead, for the reason that the brain is well protected by the very flat angle at which the head is held. The brain is small, and at the speed at which the target is moving it is not an easy shot; besides, the angle being so obtuse, the bullet might easily glance off, perhaps not even stunning the animal.

There is one shot, however, that can be made in such a case, and that is to cover the buffalo's head with the rifle and stand perfectly still until the animal gets within about twenty feet; then, when it thinks it has fixed its assailant's position with sufficient accuracy, it lowers its head and makes the toss on reaching the spot where its enemy stood when last it saw him. But one must take some pains not to be on this particular spot at that moment. When the buffalo lowers its head, it immediately exposes a large part of the back of its neck, and the moment the head goes down one must put a shot into the spine and jump quickly and far to one side. I fired and jumped, but only just in time, as the end of the horn scraped the back of my trousers. My shot, however, did not drop

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the buffalo at once, the animal going on ; but after some yards it began to totter, and I put a second shot into its heart and so ended the battle.

A number of buffalo have fallen to my rifle both before and after this particular one, but never has the fight been so prolonged. In fact, with a good heavy rifle the first shot should always be fatal, or, if not fatal, the shock should so stun the animal for a moment that a second shot can be got in before it has time to escape.

On the next day, after the carriers and machilla men had all had a good fill of buffalo meat (and it is surprising how much they can get rid of when they try), we started on the path to the Kafulafuta Mission Station, which is situated on a neck of high ground, bounded on the north by the Kavu and on the south by the Kafulafuta rivers. At this mission there lived two White Men, Messrs. Phillips and Masters. The station was built by the missionaries themselves, and what was once forest is now showing as a prosperous little settlement, with gardens sloping down from the houses towards the rivers on either side.

The neck of land on which the station stands is not very broad, so that in the wet season when the rivers are in flood and the neighbouring flat country under water, the station and its gardens present the appearance of a peninsula surrounded by water on three sides. This is the only drawback to an otherwise excellent situation, as the presence of still water is conducive to much torment from the mosquitoes which breed all round.

Kafulafuta Mission Station

I have known this spot and the missionaries almost since they settled in North-Western Rhodesia, and have thus had an opportunity of noting the various phases through which a mission passes in a new country.

There are a good many villages near the mission, this being the main reason for the choice of the spot, and as some of them are quite large, the surrounding population is considerable.

At first, when the missionaries arrived, they were looked upon with suspicion, and it was not until they had been there some time and had cured much sickness that the natives would come in any numbers to the station.

Mr. Phillips had been resident in Nyassaland prior to his arrival in North-Western Rhodesia. On taking up residence at Kafulafuta, he was faced with an unknown and unwritten language, which he at once began to reduce to writing, in order to be able to translate parts of Scripture into the vernacular. At the time only about two White Men could speak this, the Walamba tongue. When last I visited the mission there was quite a large attendance at the school which had been started, and many of the children were being taught to read in their own language. School occupies part of the day, the remainder being taken up in working in the gardens and in various other duties round the station. At this mission, as in all missions that are doing any real good, the principle is recognised that it is necessary, besides teaching the native to read and write, to teach him also the dignity of manual labour.

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One day while sitting in one of the huts these missionaries had a miraculous escape. The building was struck by lightning and caught fire, and a donkey that was standing on the verandah in the shelter was killed instantly. Both men inside were stunned for some seconds, but they recovered and managed to escape before the burning roof fell in.

Some distance from this station, at the end of a long and tiresome march, and just as we were nearing a village where I intended to camp for the night, I was walking along with two of my machilla men in front of me and the main body of carriers close at hand, when on turning round a bend in the path, there, right in front of us, lay a large lion. I was not at the time carrying a rifle, but called out to the man who had my elephant gun to give it to me. The lion stood up with a growl and started to walk very slowly to one side; then, turning round when he was about twenty yards from the path, he faced me, growling and lashing his tail from side to side. As soon as I could load my rifle I fired, but being a little hasty the bullet went rather too high, and instead of entering the heart, lodged in the shoulder. The shock, however, was enough to knock the beast over. He got up again almost at once, but by this time I had slightly altered my position and could get a clear view of him. As soon as he saw me he stood up on his hind legs, with a roar, extending his front legs and offering an excellent target. I took the chance and with the other barrel dropped him dead.

Chimangemange was close beside me and Sunguweli

Kombarumi

just behind, but on turning round to look for the other people not one was to be seen ; all the loads were lying on the ground and every available tree of any size was inhabited by one or more natives. I asked Sunguweli where all the men were, saying that I could only see birds. This, and seeing that there was no sign of life left in the lion, brought them all down. I had one boy with me who went by the name of Charlie, and who in his way was quite a character. Now it happened that just the day before I had overheard on the march quite a long conversation between Charlie, who was an Angoni, and several other men who lived in the Walamba country. Charlie had been telling them what great hunters his own country produced and how easily they killed their game—indeed, he went so far as to say that his countrymen would tackle even lions single-handed and slay them with an axe and spear. Charlie, it turned out, was one of the first to drop his spear and make for a tall tree. The Walamba to whom he had been talking the day before did not forget to point this out to him.

I had not had my large rifle very long when the above incident occurred, and shortly afterwards I shot some buffalo and two elephants with it. My men then named the rifle Kombarumi, by which name it became well known throughout Walamba country ; in fact, in some places I used to be better known as the owner of Kombarumi than by my own native name of Mundungani. The former word means, I think, something like “the slayer of males,” while the latter

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indicates a person who is always moving or who does not rest in one place.

As soon as the villagers heard the shots they came out to see what was the matter, and when they saw that the lion had been killed there was great rejoicing. It appeared that this particular animal had been in the vicinity for some months, and had killed eight or nine natives, mostly women. These latter it had caught by hiding in the long grass near the water-hole, which was a short distance from the village, and pouncing out on them as they passed with their pots on their heads. The lion proved to be fairly old as well as a man-eater, and his death was thus a good riddance. It appeared, however, that I had only done the minor part of the business, as although life was extinct from the body, the spirit was still alive. This the villagers proceeded to kill, the process being accompanied all night long by the beating of tom-toms, singing and shouting. On passing the same village at a later date we took care to ask if they had been successful in killing the lion's spirit, and were informed that this had been done, as the animal had never revisited them in spirit form since.

CHAPTER XII

Bwana M'Kubwa Mine—Malachite used medicinally—Chiwala—N'dola—
Divide between Congo and Zambesi—The Irumi Mountains—Bahamas—
Driver ants—Black ants—White ants.

BWANA M'KUBWA is one of the largest copper-mines in Rhodesia. It is only a few miles south of the Congo Free State frontier, and was worked extensively in the past by the Arabs.

The ore is found in a vein, on either side of which there is a zone of variable width impregnated with copper ore, the values becoming less as the distance from the vein increases. The deposit here is of the same nature as the large deposits in the Katanga copper-fields. Although the present workings have attained a depth of over four hundred feet, the true sulphide zone has not yet been met with, the ore still being all malachite or carbonate of copper. Much pure malachite in large pieces is found, and this has among the natives a considerable medicinal value, being known locally as Chifufia. For a medicine it is ground very fine between two stones. This powder is used for dressing ulcers, which are very common, particularly on the shins, as the natives often hit the front of their legs on sharp pieces of wood or tree-stumps concealed in the thick grass. The wound thus caused is either unheeded or has some filthy concoction plastered

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over it, with the result that it soon begins to fester and then turns into a running ulcer. This frequently goes so deep that the bone is affected, and before matters can right themselves a piece of dead bone has often to be removed. Some, in fact most, natives have no idea of cleanliness, and never wash or clean a wound ; instead, they often bind it up tightly, thus stopping the discharge. The result of such a procedure in a hot country can readily be imagined.

Near the Bwana M'Kubwa Mine lived an old chief called Chiwala, who in days gone by was the most powerful chief for many miles round. He had some Arab blood in his veins, and did much slave trading, making war on the more powerful villages and raiding *the smaller ones*. *The captives thus obtained* were handed over to Arab slave traders, who loaded them with copper ore and ivory, and then started them on their laborious journey in large caravans down to the coast. This district is unquestionably one of the sources from which much of the copper ore came which Dr. Livingstone saw being carried by slaves.

Several old Arabs still live in the village, but Chiwala is now a man of small consequence, one of the first results of the British occupation of what is now North-Western Rhodesia having been the breaking of his power and the end of the slave raids. He had a large number of wives, but when these latter saw that he was no longer a man of any importance, the majority of them deserted him, as did also nearly all his following.

It is supposed that Chiwala has a large store of ivory



A WHITE-ANT HILL



ARAB WORKINGS. BWANA M'KUBWA MINE

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Divide between Congo and Zambesi

hidden near the village, the exact location of which is known only to himself, his chief wife, and one other old man, but whether there is any truth in this tale it is hard to say.

Where Arab influence penetrates into the country, its train is generally marked by disease of various kinds, syphilis being always one result of Arab occupation.

At about two hours' journey or seven miles to the north-west from Bwana M'Kubwa Mine is the Government station of the district N'dola, where the Native Commissioner lives. As the White population is not large, this gentleman also acts as magistrate. The post used to be filled by a famous Commissioner (famous to the native, at any rate), who went by the name of Chilupula. There were few native cases that he did not get to the bottom of, and his judgment was never far wrong. Many officials use an interpreter, either because they cannot speak the vernacular or because they think it beneath them to talk to a native direct. At N'dola Chilupula did the talking.

The border between the Congo Free State and the N'dola district is a natural one, being the high land between the Congo and Zambesi systems. This frontier extends away to the north-west, over well-wooded undulating country, in which the streams that feed the Kafue on its northern bank rise. As we follow these streams to their source, we pass through stretches of bush and narrow grassy glades in the forest, in which in the early morning and evening game of different sorts can be seen grazing undisturbed. Should we climb a rising

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piece of ground from where a more extensive view can be obtained, their course can still be followed by the thin winding line of dark green foliage which threads its way in and out among the lighter green of the bush and the yellow of the grassy spaces. Throughout most parts of Africa the shade of green of the foliage of those trees which are water-loving, and of the vines and creepers that climb through and over them from the swamp or river below, is always darker than that of the bush trees and shrubs.

Leaving N'dola and travelling along the high land in the opposite direction, i.e. to the eastward, the country very soon assumes a different aspect. Instead of undulating bush and open country, ridges of sandstone begin to make their appearance, and further on these ridges grow into ranges of hills covered with timber to the tops. Where the sides of the hills are steep and the covering of trees somewhat sparse, the grey colour of the sandstone shows through the timber, producing a much lighter green when seen from a distance. Further on still the hills give place to mountains, and soon the western peaks of the Irumi range come into view on the eastern horizon.

The Irumi range forms one of the western ribs of the great mountain chain, somewhat broken at times, which traverses Africa for a great part of its length from north to south. As the scenery becomes more rugged the nature of the foliage alters, and only in sheltered valleys is vegetation to be seen similar to that found on the undulating bush lands and sides of the big rivers to the westward.

The Irumi Mountains

On the exposed mountain faces heaths of different kinds now become fairly common. The cactus also flourishes, and can be seen in many varieties among the boulders and on the stony hill-sides,—from a dwarf species, a few inches in height, to a tree thirty to forty feet high. On the more undulating and less rugged surfaces of the mountains short grass grows, quite different, however, from the long coarse varieties that cover the plains below. This mountain grass never exceeds a foot or so in height, and if cattle could only live in the country the Irumi Mountains would form an ideal pasture land, especially for sheep, as none of the coarse weeds and grasses are to be found there in quantity.

The climate of the mountains is somewhat different from that of the bush country. During the wet season mists spread over the hills and the temperature becomes much lower, while the moisture is distributed more or less evenly. The dews are heavy in the dry season. All this tends to produce a better type of grass. To climb these mountains and inhale the fresh, bracing air after that of the fever-laden swamps almost reminds one of a breath from the Scottish moors.

In the mountains the streams flow all the year round, and one can always be assured of a drink of clear, cool water. This is not appreciated to its full extent until one has travelled over a waterless country in the dry season. In the Irumi there is no anxiety as to whether, on reaching camp, there will be water or not.

In a dry country it is no use asking whether the water is fit to drink, for drink it one must; the

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necessary precaution of boiling does not make it much less like pea-soup and very often increases the bad taste.

I used often to climb to the top of one of the smaller hills and try to take in some of the panorama that unfolded itself below. As far as the eye could reach was one huge plain, intersected here and there by a streak of silver bordered by a dark green fringe of foliage, where some great river wended its way to the coast. Dambos (open spaces) and bush alternated, till the former became specks and then undistinguishable, the view dying out in the dark blue peaks of some lofty mountain range often eighty or a hundred miles away.

Troops of baboons live among the rocks and hills, and they can often be heard barking to one another across a small valley. The marvellous quickness with which these animals catch and eat scorpions is worthy of note. The baboon is very fond of a scorpion, and is often to be seen running along the side of a hill or stony piece of ground, turning over stones, under which scorpions frequently lie. When a scorpion is discovered, and before it has time to nip its captor, the baboon throws it up into the air and, as it falls, catches it before it touches the ground and pulls off its two claws; it is then a simple matter to remove the tail, when the remainder proves a tasty mouthful.

Baboons become a great nuisance in parts of the country where farmers have settled. They steal the corn and fruit and make themselves generally objectionable, often coming down to the farms and attacking

Driver Ants

goats and sheep ; they have a great liking for milk, and will catch a goat in milk and tear her udder right off, leaving the goat to die. It is well known that these animals are very greedy, and this is made use of by some of the South African natives in their capture. A large pumpkin is taken and a hole cut in it just large enough for the baboon to put his hand into when it is extended ; some choice morsel is then placed inside the pumpkin, such as a small cob of green corn, which the baboon has a great liking for. The animal coming along sees the pumpkin and turns it over. Finding the opening, he looks inside and sees the corn cob, puts in his hand and grabs the corn, but discovers that he cannot withdraw his hand without opening it and so losing the corn. He starts to run off, dragging the large pumpkin with him ; but this greatly hinders his movements, and allows the native to come up and spear him. I have never actually seen this happen myself.

In many places in Central Africa driver ants are to be met with, much to the traveller's annoyance. These insects travel in armies, and when on the move usually construct a road for themselves, along which they progress, such roads being from half an inch to an inch in width, and having raised sides or walls made of small particles of mud or soil ; these walls afford a certain amount of protection to the traveller.

The driver ant is carnivorous. It is extremely interesting to watch an army on the move, although care must be taken not to step near the line of march. On account of their persistence and the numbers in which they travel, they generally prove conquerors.

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If these ants manage to get on to one's body at all, they spread in a few seconds in large numbers, and the first notice one gets of their presence is a number of sharp bites. The driver ants do not bite immediately they reach the flesh, but wait until a number of their fellows have also obtained an advantageous position, when upon a given signal they all bite together. The reason for this move is obvious ; if, when the first ant got above one's boot, it bit immediately, its presence would be discovered, and before many more could get on to one's legs, good care would be taken to shift to a spot where there were no more driver ants. In pulling them off after having been bitten, care must be taken to remove the whole insect, as they make their nippers meet in the flesh. If the ant is pulled away quickly, the head parts from the body and the nippers are left in the flesh, with the result that a small sore is apt to form.

Driver ants sometimes stampede a herd of cattle. The ants get on to the animals, enter their nostrils and ears and begin to bite, when the animals turn almost mad, sometimes rushing into a river in an attempt to get rid of their enemies, and being drowned.

All wild animals have a terrible fear of these ants. I once saw a case where a baboon belonging to a White Man was tied up to a pole near his hut. The animal caught sight of some of these ants a little distance away, and got into such a state of terror, not being able to escape, that for some time afterwards it was doubtful whether it would recover. The ants did not even touch it, as its cries attracted attention and

White Ants

it was released from the pole and removed to a safe distance.

There is a large black ant which also travels in armies similar to the red or driver ant, though never in such numbers, but its organisation is more perfect. The black ants march in a column four or five abreast, with regular scouts thrown out in front and on either side. These ants are about three-quarters of an inch long, on the average, and if attacked while on the march immediately spread out into skirmishing order, at the same time making a buzzing noise. They appear to have their sense of smell wonderfully developed. I have sometimes placed an obstacle in their way, thus detaching a small body from the rear of an army, and have then watched the efforts of the isolated section to locate their comrades. By the time the obstacle had been removed the main army had gone too far to be heard and were also quite out of sight, and as the ground was hard their track must have been invisible. Those that were left behind, however, commenced to move backwards and forwards over the ground, and without much loss of time picked up the track, hurrying along it to rejoin the main army.

A common prey of the black ant is the white ant. These latter spend most of their time in their hills, and only come into the open to secure food at certain times, generally at night, when the black ants do not travel.

The white ants cut up leaves and grass into small pieces and store large quantities in their homes underground, to be consumed when the country has been

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burnt and there is little food about except timber. Should a piece of a white ants' hill be damaged or removed, as for instance by some passing antelope, it is at once repaired, the breach being closed up by moist particles of mud and soil, which soon dry and form an effective barrier to an attack from outside insects. Should an army of black ants come along before such a breach has been cemented up, they immediately enter, and it is not long before the marauders can be seen making their exit, each with an egg or a captive white ant, which they take away and eat. The white ants are no match for the black, once the latter have forced an entrance. So the only hope for the former is to keep all the entrances to their stronghold closed while any of their enemies are near.

CHAPTER XIII

The Toe of the Congo—Congo officials—Native police—Atrocities—Wrong class of man for Officials—White ants—The queen ant—Roads—Bridges—The Alala—The ground tusk—The African hunting dog—Their method of hunting.

CROSSING the frontier from North-Western Rhodesia into that part of the Congo Free State known as the "Toe of the Congo," which is the neck of territory projecting into Rhodesia, the vegetation is slight, the foliage becoming if anything a little more tropical.

The Government stations in this part of the Congo State are not very frequent; they belong to the administrative division of the Upper Congo. I was in the country for some days before arriving at a boma or station, but when we did get there I was made welcome by the White Man in charge. This official could speak no English and I could speak no Dutch, so that we had to use a native language—Swahili—to converse in. It must appear to the native somewhat peculiar for two Europeans to meet in the heart of the African continent and to have to speak to each other in a Bantu tongue.

Many of the Congo officials do not travel in their districts. On arriving from Europe they are sent up-country with some native soldiers to their post, which

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may be many hundred miles from head-quarters. They are required, those of the Katanga Company, to collect a certain quantity of rubber, and as they seldom leave their station, most of the supervision of this outside work falls to these alien soldiers or police, who are in some cases recruited from cannibal or semi-cannibal tribes some distance away. As these strangers are thus, when outside the station, free to act much as they please, without being restrained by the presence of a White Man, the source of many of the atrocities of which so much has been heard is not far to seek. These police become tyrants, levying tribute over the district on their own account, as well as on their master's. If a native is given the least authority, he is certain, unless kept under the strictest supervision, to overstep the mark and abuse the trust placed in him, using the cloak of the White Man to further his own ends.

I quite believe, from what I have seen in this part of the Upper Congo State, that some of the outrages that take place do so without the knowledge of the Belgian official, and also that they will continue until the type of man sent out from Europe to fill the post is changed. This person must also be required to travel over his district and become acquainted with the people himself. When he has gained their confidence (which can be done with some little pains), they will come to him if they know that they can get justice, and lay any cases of maltreatment before him.

There appears to be both in Congo and German territory one great fault in the Native administration,

Congo Officials

viz. that excepting some of the officials who hold the highest positions, the majority go out with the idea of only remaining for as short a time as possible and making the maximum amount for themselves during their stay. The type of man required to take charge of a native district is not one who has been a non-commissioned officer in the Belgian army, and who immediately develops into a petty despot as soon as he becomes invested with a certain amount of authority, as an official in charge of a district some hundreds of miles from head-quarters.

It is absurd to take the average man of the lower classes from some very subordinate position at home, and without any further training to place him in complete control of many thousands of his fellow-men, even though these be natives. The only supervision that such an official comes under is the possible visit from a superior officer, perhaps once a year, and the reports that must be sent in to head-quarters every month. There are, of course, many exceptions, but these only go to prove the rule. It is hard enough in our own territory, with the best class of man to choose from, to find the right people to fill similar positions, and even then the real successes are not too common.

Belgian officers get a liberal allowance of wine of different kinds, but in the food line they are not so well off as their friends across the border. Whisky is not included in the wine list, and consequently an exchange can very often be effected, much to the advantage of both parties, since wines are by no means

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common in Northern Rhodesia. The first boma I arrived at was the last one to which the cut road had been made, i.e. the furthest in the interior. From this particular station it took six months' travelling, first on foot and then by river, to reach the sea at the mouth of the Congo. Since the railway has been built through North-Western Rhodesia, the officials in part of the Upper Congo State can by its means reduce the time required to reach Europe by several months.

The official at the boma in question was very glad indeed to see me. He was evidently very home-sick and was counting the days till his term of office would be up, saying that if he ever reached Europe alive, Africa should never see him again. Most probably, after he had been at home for a short time, he would be seized with that peculiar longing to return which Africa exercises over her adopted sons, and would come back, eventually to die in one of those little-known regions of the Dark Continent.

In this part of Africa the white ants build extremely tall ant-hills; many of them are not of very great circumference, but they stand up just like pillars, thirty to forty feet high. A possible explanation lies in the surrounding bush being often very thick, thus causing the ants to build the pillar-shaped hills, in order that they may get above the dense bush and obtain from the sun the additional heat which is so desirable during the time their eggs are being hatched. In the day-time the eggs would be carried up to the very top, and when that part of the hill began to get cool in the evening, they would be taken down to below the

The Queen Ant

surface of the surrounding ground, where the colder night air could not affect them.

No matter how dry the surrounding ground is, if a piece be broken off a white-ant hill the interior is always moist. The outer covering is made very dense, in order to prevent evaporation, as the white ant must have a certain amount of moisture to support life. Nearly all white-ant hills have very deep workings below the surface, passages which extend to a depth of fifteen to thirty feet. From this it will be seen what a difficult proposition it is to try to exterminate the white ant.

Should the water-level be even more than thirty feet below the surface, a passage must go down to that level or to a point where the soil is permanently damp, in order to obtain water, as it would be impossible to store sufficient to provide moisture all through the dry season. The queen white ant is very much larger than the ordinary workers, being from two to three inches long in the body and as thick as one's little finger. Her apartments are located near or at the bottom of the nest, in what is really the safest position that could be chosen. The only hope of destroying a colony of these insects is to kill or remove the queen, and in even a small nest it is astonishing at what a depth she lives.

The main roads which run through the Congo Free State from end to end, connecting the different bomas, and which are used as mail routes and for all transport purposes, are well kept up and in so far offer excellent facilities for travel.

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Unlike the custom in British territory adjoining, the natives are not required to pay a tax in coin, but an equivalent in rubber and food-stuffs, and they must contribute to the upkeep of such roads as pass near or through their villages. This latter is no great task, as when all the men, women and children turn out with their hoes and axes, a very few days of such work twice a year will suffice to keep the road in good order. Since the natives are the principal users of the roads, the work is thus mostly for their own benefit.

The roads are carried over streams and swamps by quite respectable bridges, which the natives construct. These generally take the form of forked sticks stuck into the bed of the swamp, opposite to each other and supporting a stout cross-piece. Two long beams are then placed on the top of these cross-pieces and a surface is made of sticks or poles, some three inches or more in diameter, lying side by side as close as possible across the top of the two beams, the sticks being spiked or tied down to the beams.

In the matter of making roads through the country, the Northern Rhodesia Administration might certainly take a lesson from the Congo. Some fairly good roads do exist in North-Eastern Rhodesia, but in North-Western the construction of a road is left to a company or an individual, and as there are only a few concerns that benefit directly by such work, the hoed paths or roads to be met with are few and far between. The general form that such a road takes is a track some four feet wide, known as an *mseu* by the native. The growth of small bush and tufts of grass is removed

The Alala

with an axe or a hoe. The word "road" is somewhat misleading to the European, who must in no case expect a metalled surface. Still, when the *mseu* has been gone over with hoes for several years, with the result that all the shallow-rooted grasses have been removed or killed off, the surface is excellent for cycling on.

Much of the "Toe of the Congo" is inhabited by a tribe known as the Alala, who are in many respects similar to the Walamba. They cover a large stretch of country, but the last time I passed through their land they were without a chief, as the spirit of the last one had passed into two women. These two ladies lived in villages a little over a hundred miles apart. On arriving at a camping-place near either village, the same incident happened in both cases—the woman came out and executed a series of extraordinary dances. Whether half the spirit of the departed chief was accountable for this, I do not profess to say. When she had finished, she requested a present of beads, which I gave her.

Following the cut road towards the Luapula River, on crossing a large dambo or open space with a small stream or marsh in the middle of it, we came on a quantity of fresh elephant spoor, from which it could be seen that a herd of twenty or thirty animals had passed by only a few hours before. They were, however, going in the wrong direction, and as I wanted to make a certain camping-place that night, I did not go after them. In the Congo State the ground tusk of every elephant that is killed belongs to the Government. This means that when the elephant has been

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killed the tusk which touches the ground first must be given up. Whether this is a polite way of demanding the larger tusk, which would be the longer and would probably touch the ground first, I cannot say.

Many of the natives in these parts hunt elephant. They take the ground tusk to the nearest station and sell the other for what they can get, generally calico, powder, and such goods.

Of late years the game laws have become much more strict, but as in the interior there are not very many officials to enforce them, some illegal elephant hunting is still done. It used to be a fairly common occurrence to shoot elephant near the frontier, and if a British official was met with, then the ivory had been obtained from an animal killed in the Congo, and *vice versa*. Owing to new regulations of the Chartered Company, however, restrictions are now placed on ivory brought over the frontier, in the shape of a declaration as to its source, etc., which has effectually put a stop to this kind of thing. A licence of £50 is now required to kill two elephants in British territory.

One day, when passing through some bush country, we came on a small pack of hunting dogs who were finishing the remains of the carcass of an antelope. These animals are the fiercest and most to be dreaded of any that are met with in Central Africa. They hunt in large packs, so that should a traveller be attacked and succeed in killing even a number of them, that would be of little use, as those behind would come on till their enemy was gradually overpowered. The natives, when they hear a pack coming, immediately



HARTEBLESTIE, WITH ANT-HILL IN THE BACKGROUND



CENTRAL AFRICAN HUNTING DOGS

Method of Hunting

take to a tree and remain there until the pack has passed. Should a lion have just killed an animal and be starting to eat it, and should some hunting dogs come along and see the meat, they will drive the lion away. If the dogs are in sufficient number, the lion will at once vacate his kill in their favour.

They hunt down any game they come across in the following manner. As soon as an animal has been singled out from the herd, two or three dogs will follow it close at hand, the remainder of the pack coming on some distance behind. After a short time their place is taken by two or three others, fresh from the pack, the first ones falling back. The animals that do the hunting jump at their prey and bite its hind-quarters and stomach, till in the end the animal drops from the loss of blood and fatigue caused by the lacerations from the bites.

The dogs stand as high as an average retriever. All those that I have shot have been ill-conditioned and mangy. Should one during the early morning hear the howl of the hunting dog, it would be quite useless to look for game of any kind in the vicinity. So great is the dread in which antelope of all kinds hold this dog that, on the advent of a pack, the game immediately leave the district.

CHAPTER XIV

Sleeping-sickness—Tsetse-fly—Cassava—Fish-traps—Fish that live during the dry season in hard mud—Old Chitambo—Travelling in water—Wet through—Dry land at last—Dr. Livingstone's grave—Immensity of the task he accomplished.

THE Toe of the Congo is divided from North-Eastern Rhodesia on the north by the Luapula River, which connects Lake Bangweulu with Lake Mweru. The upper portion of this river flows through very flat and swampy country, much of which is in the sleeping-sickness zone. Sleeping-sickness has made enormous strides within the last few years, and constitutes at the present time the most serious problem with which Central Africa has to deal. It has entirely depopulated some of the islands of Lake Victoria Nyanza, together with other wide stretches of territory. It was originally thought that the sickness was conveyed through the bite of one variety of tsetse-fly only—*Glossina palpalis*—and that only after the fly had been infected and carried the parasite *Trypanosoma gambiense*, but it has now been ascertained by the medical men who are making a study of this terrible disease, with a view of discovering a cure for it, that it is carried by at least one other insect. The *Glossina palpalis* tsetse-fly is fortunately not nearly so widely distributed over Central Africa as the *morsitans*, or

Cassava

common cattle tsetse, and as it appears that the former can only exist in the vicinity of large bodies of water, such as lakes or big rivers, its field of action is somewhat limited.

There is no practical method of killing this fly, such as is done in malarial districts with the *anopholes* mosquito. It has been attempted in places to exterminate it by clearing timber and making large smoke fires, but this method has not proved a success. The timber can be cleared for a limited space round a landing-place on a river or lake shore, but this at best can only affect a very small area.

If the timber is effectually cleared, there is no doubt that the *Glossina* cannot exist; but each year the growth of new wood is so great that, if not in one, then in two years there is sufficient new shelter for the fly to return. Apart from this, however, the area of country that would have to be cleared makes the task of attempting to exterminate the fly by this means altogether too large a matter to be considered.

One of the first visible symptoms of sleeping-sickness is the swelling of two glands, one on either side of the spine at the back of the neck. The patient gradually loses all energy, until at last it requires quite an effort to wake him up, in order that he may take food. It is stated that the end is quite painless and death easy.

From the Luapula and to the eastwards a very favourite food with the natives is cassava, a kind of mandioca, the part eaten being the root of the plant. This is a white fleshy substance not unlike a sweet

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potato, only longer and containing a small stringy core. It is, however, more often made into flour by the following process: the roots, after being washed and soaked for some days in water, during which a poisonous oil exudes, are dried in the sun and ground between two stones, the material having been slightly moistened beforehand. A beautiful white flour results, which is again dried in the sun and is then ready to be cooked. A kind of porridge is usually made from the flour. When one has little variety of food, this is to be by no means despised.

Many of the natives in this part of the country catch numbers of small fish, very similar to whitebait, and at almost every village one sees, during certain seasons, quantities of these fish spread out on mats, either on the ground or on the roofs of the huts, to dry in the sun.

During the wet season, when the rivers rise, much of the surrounding country is flooded and many of the dambos become small, shallow lakes. Across these open stretches of ground the natives build, in the shallow lakes, small walls of turf, and at intervals of a few feet near the centre of the dam they insert wicker-work traps or baskets. These fish-traps are constructed something like our own lobster-pots, and although quite easy for the small fish to enter, are hard to get out of. Where the depth of the water is more than a foot, a sort of palisade of sticks, reeds, and branches is built across the dambo, especially if in the centre there is a small permanent stream. In the case of a larger stream much larger traps are used, and quite

Old Chitambo

big fish are caught. Many varieties of fish go up these flooded streams, and on to the plains when covered with water, to spawn.

At the beginning of the rains, when the ground has become soft without being as yet under water, large flocks of storks and other long-legged water-birds come from the lakes and large rivers in quest of the numerous insects, small shell-fish, and snails that then come to the surface, and even some kinds of fish appear to be able to survive the dry season in the almost dry ground. There are many places that in the wet season become ponds, some of considerable size, and these towards the end of the dry season lose all their water. Yet, as soon as there is a small amount of fresh surface water in them again, as a result of the early rain, quite large fish which seem to come from nowhere are to be seen swimming about. The only apparent explanation for this is that the fish must have lain dormant in the hard mud during the dry weather ; and as wild pigs and other animals come and root about in the mud when these ponds are empty, the fish to be safe must needs penetrate to a considerable depth.

After arriving at a spot on the Luapula River only a few days' journey from the place where Dr. Livingstone's heart is buried, I decided to go slightly out of my way in order to visit the grave (in 1906). On all the maps of Africa, the place where this great explorer and missionary died is marked as Old Chitambo, but it is known to the natives locally as Chipundu. There used to stand on this spot a large tree, under which on his death the followers of Dr. Livingstone buried his

In South Central Africa

heart before embalming the body. This tree belongs to a species called Mpundu by the natives.

It is usual in Africa for a White Man to be described by the natives as possessing a good or a bad heart. By this they mean a man who will treat them well and who has their welfare at heart, or a man who simply regards them as so many animals.

On Dr. Livingstone's death, as his heart was "good," the natives wished it to remain in the country, and for this reason it was extracted from the body and buried where it now lies. When in later years it was decided to build a monument over the grave, the tree was cut down, and a brick and concrete obelisk erected on the spot where the tree stood, directly over where the heart is supposed to lie. Before his death Dr. Livingstone cut an inscription on the tree, and now this part of the tree with the inscription on it can be seen at the rooms of the Royal Geographical Society in London.

Up to the time of my visit the spot had been visited by less than a score of white men, and it was therefore not surprising to find that it had a wild, neglected appearance, from having become overgrown with rank vegetation. With the assistance of an old chief of a neighbouring village and sixty natives, I was able to cut away the overgrowth of jungle and to plant a square belt of trees, to surround the clearing in which the monument stands. These trees are now protected by a fire-guard of ploughed earth, as are also the small clump of old trees, about twenty yards distant from the monument, in which Livingstone's men pitched their tents



WHERE DR. LIVINGSTONE DIED

Travelling in Water

for the last time before the death of their much-loved master and friend.

On approaching Chipundu from the Luapula, much flat swamp country has to be traversed. The swamps to the south of Lake Bangweulu are impassable in the wet season, but as I had not much time at my disposal, I wished to avoid going further south than was necessary, so took a route which I thought would just miss the southern edge of the swamps. The wet season was now far advanced, all the rivers were in flood, and there were pools of surface water everywhere. This resulted in the presence of quantities of mosquitoes, whose constant singing during the night formed an accompaniment to the deeper and hoarser croaking of the frogs. The peculiar smell of the Central African swamp was now always apparent. Ever and anon, as we came to the edge of some sheet of water, we would disturb large flocks of duck and geese, which flew away with a great clatter, but soon settled again. Spurwing geese are very common, but one can seldom get near enough to shoot them with a shot-gun, and latterly I never attempted to use anything but my light rifle. The geese are not very good to eat, being somewhat strong and altogether too large for the pot, so I used to get my cook to cut a piece out of the breast and cook this in a frying-pan, giving the rest of the bird to the men.

We travelled on for some few days in an easterly direction from the Luapula, not going very quickly, as with the rains progress was necessarily slow, and came to a point where to the east and north there was nothing

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but water as far as one could see, with an occasional ant-heap showing here and there, indicating that during the dry weather this was a plain. From one of the adjacent villages we obtained a guide, who said that the only route was to cross this flooded plain to some villages on the opposite side, when we could procure another guide, who would take us to within one day's journey of Chipundu. We set off and for that day walked in water never less than ankle deep, but never reaching above the waist. One has only to try this method of travelling to find out what hard going it becomes after a mile or two. The plain proved to be much wider than our guide had told us, and to add to the discomfort we had heavy rain during all the latter part of the day, and towards the end deep water never below the knee. It can be imagined how carriers dread such a journey. Fancy having to go for mile after mile and never be able to lay down one's load for even a moment; how terribly heavy the load must eventually become!

At last, on arriving at the village on the other side, thoroughly tired out and wet through, not only to the skin but through the skin, the settlement proved to be a miserable collection of huts on a small piece of rising or rather slightly raised ground, just high enough to afford a dry place on which to build a few huts. Here even the dogs were too wet and miserable to come out and bark at us; their existence, however, proved that the neighbourhood was at least free from tsetse-fly.

There was little or no food to be procured and almost no firewood. As my men had not had very much to eat

Dry Land at Last

for the last two days, this was a bad state of affairs. No matter how bad the going, if you can give your men a good feed in the evening, and they can sit round a large fire and get some of the moisture out of themselves, they forget all their sorrows and start off again on the morrow with a light heart.

Having bought up every available item in the way of food, we had just to make the best of it. To cut a long story short, we had three more days of this, practically water all the way, and one night we had to go on so far that I began to despair of our reaching a sufficiently large piece of dry land on which we might all sit down together.

On the sixth day after leaving the Luapula, in the afternoon, a number of palm trees became visible in the south, and on our turning a little more in that direction, some slightly rising ground covered with bush soon came into view. Many people say that they get tired of the eternal African bush and ask, when on the march, if they are never coming to the end of it. I would like to have had one of these persons with me then, and to have seen with what gladness he would have welcomed that strip of African bush. It meant much to us, as that night there would be a big fire and a chance to get dry, everything we had being wet. My tent and blanket had become wet through after about the second day's journey through this water country.

Not very far away was a large village where there was food, and on arriving at the bush, after pitching our camp, a number of villagers came in with various

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kinds of provisions to sell. All the next day we stayed there, the men lying by the fires and eating, while my clothes, blankets, etc., were spread out to dry, as the sun fortunately came out and there was no rain.

On taking a walk round the village next day, the people proved to be very shy of my camera. The natives call their photograph their shadow, and when one desires to take a photo, it is usual to intimate that you wish to put their shadow in the box, i.e. in your camera. The chief of this village was a somewhat important individual in his own estimation, but did not prove of much use in furnishing information, as can be seen from the following conversation—somewhat after this manner: “Who are you?” “I am the son of my father.” “Who was your father?” “His father’s son.” “I want to go to Chipundu, do you know the path to go by?” “There is no path.” “How many days’ journey is it away?” “You will travel for many days before seeing it.” “I want to buy some more food for our journey.” “There is only hunger here.” “Can you give me a guide to take me to Chipundu?” “No. No man here knows the way.” After much more of this sort of thing I at length asked him, “What do you know?” to which he replied, “I know nothing,” whereupon I left him.

As Chipundu is known for several days’ journey round in all directions, and as I got another man from this village who said he could take us there in about half a day, an explanation of the chief’s answers is that he probably thought I might want him to accompany

Dr. Livingstone

me on the morrow if he showed any knowlege of the surrounding country. This tends to show how unreliable native information may often be.

We started the next morning, and arrived about midday at Chipundu. The country between this last village and Livingstone's grave is partly open and covered with water, and partly bush. Old Chitambo's village was situated just about the edge of the district, which in the wet season was practically the continuation of the Bangweulu swamps.

When one realises that Dr. Livingstone journeyed to his last resting-place over much the same route as I had followed during these few days, and that he reached Chitambo in the wet season, when the country was under very similar conditions to those just described, the difficulty of this—his last, and of many of his previous journeys can be to some extent imagined. Even with all our modern comforts, including tinned foods, etc., it was by no means simple.

I had a good supply of quinine, some of which I took every night, and was thus free from malaria; but Dr. Livingstone, long before this stage was reached, had lost all his medicine and was suffering from chronic malaria. One only requires a very short attack of malaria to experience how utterly it unfits one for any prolonged mental or physical effort. In spite of all this, he continued his observations and notes right to the end, demonstrating what tremendous will power he possessed. It must be remembered, too, that in his case this state of things had been going on for weeks and even months. Through all his journeys

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Dr. Livingstone never used force, which speaks volumes for the extraordinary patience he must have exercised in all his dealings with the natives.

When the seeds of the gospel were planted by such a man as this, little wonder that they took root.

In travelling through some parts of South Central Africa, one can read Dr. Livingstone's works, to find that his descriptions remain so true even up to the present time that they might have been written yesterday. From this it will be seen how little the conditions have altered in some parts of the interior.

Sometimes, later, when we were having a particularly rough time and were inclined to think things a bit bad, I used to remember the few days prior to our arrival at Chipundu, and then picture what months instead of days would have been like in such a country, and that without quinine. This mental picture was sufficient to make one's own hardships appear in a much less severe light.

CHAPTER XV

The Awisa tribe—Manure from burnt timber—Rapidity with which land once cultivated returns to a state of nature—Native organisation—Custom on receiving presents—Native children's capacity for food—Serenji—Native thatching—Borers—Borer-proof timber—The jigger.

LEAVING the flat, swampy country that surrounds Lake Bangweulu and pushing northwards, the land becomes more undulating and is consequently better drained. Soon can be seen hills which, on nearer approach, prove to be ridges of sandstone dipping almost vertically. Between these ridges there are often fertile valleys with a small stream of running water wending its way through the centre. In this country live the Awisa people—a numerous tribe closely allied to the Awemba, which latter occupy the country to the north of the Alala and the Awisa.

The Awisa grow a quantity of a small red millet, quite a large proportion of which is used for making beer. In order to yield a good crop, this grain requires a soil rich in potash, which is obtained by cutting down the bush and timber for a radius of several hundred feet and piling this into a heap. When the brush and timber become dry, and when the wet season is at hand, this heap is set fire to, and the ash thus produced supplies the potash manure required. In some cases, after the wood has been burnt, a strong

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wind springs up and blows the ash away, much of the potash being thus lost. In order to avoid this, the natives generally try to burn the wood just before a rain-storm, the water thus dissolving the soluble salts and carrying them into the soil. This method of cultivation and manuring is very wasteful, as a much larger area of timber-covered ground is required to supply fuel for manure than is actually put under cultivation, so that after one or two years' cropping the ground is abandoned.

The system of cutting down the timber in order to supply manure for the crops is in vogue among all the tribes, but the majority do not practise it to the same extent as the Awisa. Most tribes clear a spot for their crops and, making use only of the timber thus felled, grow corn or other produce for three or four years on the same land, utilising the stems of the corn and other dry vegetable matter besides wood for burning for manure just before the rains. Some of the tribes cut the trees down, leaving a stump about three or four feet high, the reason for this being that with their small native axes the easiest position in which to work is standing up straight. They consequently chop right in front of them, which means a height of from three to four feet from the ground. As they do not remove the stump in any case, they say that they do not see why they should go to the extra exertion of bending their backs. Other tribes, again, do not even go to the trouble of cutting down the trees, and one sees on approaching a village the peculiar spectacle of a number of trees from which all the small branches

The Awisa Tribe

have been removed. When a suitable piece of ground has been selected for cultivation, the men climb the large trees and cut off all the small branches. These are piled up below and burnt as before. In most cases the lopping does not kill the tree, so that next year a stumpy new growth comes out, the tree retaining its rather peculiar appearance for some time. From this the sites of old villages can be located long after all trace of huts or other remains has vanished.

It is usual among most African races to build a sort of shrine near, or just outside of, their hut. The head of a family will often plant a number of thorn sticks in a line near his hut, on which, if he is a hunter, he will place the skulls and horns of any game that he may kill. Formerly these sticks used to be ornamented with human skulls, trophies from his vanquished enemies, but this practice has been put an end to by the occupation of the country by the White Man. It is rare now for such human trophies to be seen. When the village is abandoned these sticks remain, and as the majority of them generally take root, they form a monument which marks the site of the old home.

It is wonderful how soon Nature reclaims her own. This is continually brought home to anyone who travels through an uncivilised land. Here and there are to be seen the remains of former habitations, but very soon after their abandonment almost all trace of them is wiped out. The country is swept yearly by bush fires, which rapidly destroy the remains of any huts or houses, constructed as these are of wood, mud, and

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grass. Perhaps, in the second year, the site can be located by a phenomenally large crop of grass on the spot where the hut had stood. This is due to two causes: firstly, when the huts were in existence the ground was kept free from vegetation, which is equivalent to a period of fallow; and, secondly, manure is produced by the burning of the material used in the construction. By the third year the young trees which seem to spring up all around have attained to a considerable height, and in two more seasons it is quite hard to find any trace of the dwellings.

The Awisa live more in colonies than do some tribes that inhabit the land further to the west. In their country, when a village is reached, it is often found to be the first of a collection of villages, which may extend over a distance of some miles. A day or more may be passed in travelling through the bush before another such colony is met with, the intervening country being quite uninhabited. In this is possibly to be seen the tradition of more hostile times, when there was perhaps one large stockade in which the people took refuge when an alarm was given. To the east, however, the fighting organisation was much better, the Angoni marching and attacking in regular armies. But towards the west there was no such concentrated action, each small village doing the best it could for itself; there was therefore no inducement for them to collect in large numbers.

Stockaded villages in the Awisa country are still quite common, but these are now merely used as a protection against wild animals.

Native Children

On arriving at a village, the chief first comes to see the visitor, bringing at the same time a present, which takes the form of a fowl or a basket of meal or sweet potatoes. It is etiquette to give a present in return, and in the case of the chief it is always the correct thing to give about twice the value of what he brings. One old fellow in the west used every time I passed his village to bring a larger present. I told him one day not to bring so much, which seems rather a peculiar request to make; but he said he could not well make it less, as each basket of flour was from one of his wives, of whom he had some eight or nine. Being his wives, and thus part of himself, they could not neglect to give a present.

The capacity of the native child for food is enormous. On arriving one day at a village I saw that they had just finished a meal and got two of the youngsters to stand up and let me take their photographs. The native eats till the food is finished, and what food is at hand is always cooked, there never being any question as to whether it will be consumed or not. The degree of rottenness which a piece of meat has attained forms no barrier in the native mind as to its fitness for consumption. I have often asked the men how they can eat the meat when even the smell is almost enough to make one sick, and they have replied, "Truly the smell is bad, but then we do not eat the smell, we eat the meat."

On leaving the Congo basin and crossing the watershed between it and the Luangwa basin, some very beautiful country is met with. After passing the water-

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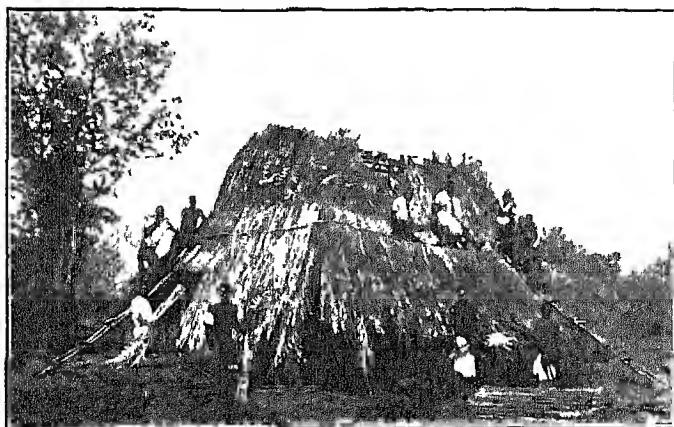
shed the surface becomes much more broken, and on penetrating further into the basin the sedimentary rocks are left behind, a region of metamorphic and igneous rocks being reached; these latter form the mountain ranges and give the country its rugged appearance. Some of the views obtained from these ridges are magnificent, and after coming from the flat swampy country to the northward one appreciates them to the full. Among those mountains the peculiar odour of the swamp no longer pervades the air, and the night seems strangely quiet without the monotonous croak of the frog.

It is in this hilly country, on a beautiful site, that the North-Eastern Rhodesian Government station of Serenji is built. This is undoubtedly one of the most beautiful stations that I have seen in Central Africa. It was planned and built by its present occupier, and all credit is due to him for a fine piece of work. Situated on high ground, which slopes away in front for nearly a mile to a small river, a magnificent view is afforded of the mountainous country so characteristic of this district. The Livingstonia Mission has recently established a station at Serenji, with a view to eventually bringing within their sphere that piece of country round Chipundu where Dr. Livingstone died.

In thatching a large hut the natives adopt the opposite method to the English one, the grass being placed on the roof with its roots upwards. In many parts of Africa native thatching is done by tying the grass into small bundles, each about three inches or so



A CHIEF AND HIS PEOPLE WITH THEIR PRESENT



NATIVES THATCHING A HOUSE

Borer-proof Timber

in diameter at the butt ; these are then put on the roof in layers, with the root end upwards. Some sorts of grass found in the bush lend themselves much better to thatching than others. The favourite kind, which is always used if procurable, is a short grass which does not grow more than three feet high. The natives say that, besides lasting longest, this makes the most watertight covering.

In building houses of any kind, the first consideration is to get borer-proof timber. Throughout Central Africa there is a small kind of beetle, about half an inch in length, that bores into almost every variety of dead wood, gradually eating the whole piece away. There are, it is true, a few kinds of timber to be found in the bush which the insect will not attack, but these varieties are hard and do not grow as straight as many of the softer kinds, and they are by no means common. Unless one watches pretty carefully what sort of wood is being used in the construction of a house, the natives are apt to put in only the common variety, as those kinds that are borer-proof require more trouble to cut, besides being harder to find. Most ordinary timber can be made borer-proof by being soaked in water for about a fortnight, immediately after it has been cut and barked, which removes most of the sap. The borers do not attack wood treated in this way to any extent, as they feed on the sap, and there is now little inducement for them to enter the stick. If the timber used has not been so treated and is not borer-proof, a continual shower of dust produced by the operations of these insects keeps falling from the roof, and if

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the wood has been badly attacked, the house becomes almost unfit for use after one season. Roofs, however, generally last for two or more seasons before being so depleted of their substance as to be unable to carry their load of grass.

The theory has been advanced that timber cut towards the wane of the moon will last longer than that cut during the first and second quarters, as in the former period there is not so much sap in the tree. It is supposed that the moon has a similar effect on the sap of a tree as on the tides. That this theory is not so absurd as might at first sight appear is seen on noting the period at which trees are ring-barked in Australia. I have been told that a similar idea prevails in parts of South America.

In Southern Rhodesia all kinds of methods are adopted for proofing timber against these pests, the favourite one being to coat the surface with some coal-tar preparation or similar product. This certainly prolongs its life, but does not in the end render it immune.

Another pest which has been becoming general over Central Africa of late years is the jigger, known locally as "maundu." These insects belong to the flea species, but are much smaller than the common flea. They are supposed to have been imported from the West Indies to the West Coast of Africa and to have spread from there over much of the continent. Natives travelling from one place to another carry these jiggers about on their feet, which accounts for their rapid spread.

The Jigger

It is only the female that enters one's flesh, as blood is required in the hatching process for the eggs. The usual place that she chooses is under the nails of the toes, and after being in position for about two days she begins to make her presence felt, when, if taken notice of at once, she can be extricated without much pain. It is better not to attempt to do this oneself, but to let a native operate, as through much practice they have become adepts in the removal of jiggers. Should the insect, however, be left undisturbed for a few days, a large bag of eggs will develop, about the size of a pea, and if this be not removed intact and with the very greatest care, a sore will probably be produced. Should the bag of eggs not be taken out, it very shortly bursts, each egg becoming a small jigger; and so the process continues. Some natives get careless and neglect these insects when they enter their feet, with the result that the foot gets into a very bad state. It is no uncommon sight to see a native minus several toes or even minus a limb, which has been lost through sores originating from jiggers. These insects are generally to be found in sandy and loose soils in the villages, and in the floors of huts which are not constantly swept out with water.

To prevent jiggers from coming into a hut, the floor should be sprinkled every morning with water in which a little sheep-dip has been mixed; one can then be fairly certain that they will not take up their abode in the hut.

CHAPTER XVI

Life of an elephant hunter—On the spoor of an elephant—Power of observation of the native—Approaching an elephant—The fight—Extracting the tusks—Cutting up the meat—Best part of elephant to eat—Bicycle medicine.

SOME distance to the north of Serenji there is a fairly good elephant country. These animals generally go about in herds and do not frequent the same part of the country all the year round. I had several somewhat interesting encounters with them, but propose only to describe one which is fairly typical of a hunt in thick country.

A good hunter, as a rule, does not have much trouble with most of his animals, but there is always a certain amount of risk. I have been told by several old hunters that if a man devotes himself exclusively to elephant hunting, and continues all the year round at his business, they give him at most five years' life. How far this is true it is hard to say, excepting that news of a hunter being killed by elephants is not such an uncommon event as might be supposed. Last season King Luanika's chief elephant hunter, a native, was killed. This man was reputed to have accounted for a great many elephants in his day, and the elephants (so the natives told me) held him in such respect that the animal that killed him covered up his body with branches, as a token of esteem.

The Spoor of an Elephant

An elephant has an extremely delicate sense of smell, and can detect an enemy at a great distance, if the wind is in the right direction. They have also acute hearing, but unless the hunter is very close to the elephant he is not seen, as their sense of sight is poor. One morning, not long after we had struck camp and were going along a native path, we came across the spoor of a single elephant crossing the path at right angles. This we could see was a bull, both on account of its being alone and from the shape of its footprints, so I decided to follow it. The animal had gone along in the very early morning; this could be told by the dew-marks on the grass and by the appearance of the water in some of the footprints on muddy ground.

Now, as can be imagined, there is little trouble in following the track of an elephant in wet weather. As we went along we found here and there fresh branches which had been broken down and the inner bark of the tree removed and eaten. The inner bark of a tree which is very common in the bush, and from which the natives obtain most of their fibre for making nets and ropes, forms a food which takes a large place on the elephant's *menu*. It is removed by one tusk being pushed into the tree between the wood and the bark, a long strip of bark being torn off; then from the strip the outer woody covering is removed and the inside fibre eaten. I had Sunguweli, who was somewhat of an elephant hunter, with me, and as we knew that the animal would be several miles away, there was no harm in talking for some distance along the spoor. He walked in front, and all the time he was describing

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to me what the elephant had been doing as it went along. How it had gone through the bush here, and then, as it came to this dambo, how it had looked first to the right and then to the left, before deciding on which side of the clump of reeds in the middle of the dambo it should go. Then it had chosen the way by which it would get the wind from the top part of the dambo, but when about half-way across it had been startled and, stopping for a moment to listen, had turned a little more to the left and entered the bush.

The cause of this fright was apparent a little further on, as we came on the spoor of a herd of sable antelope which had passed through the timber, probably cracking some twigs, just before the elephant entered the bush from the dambo. There had been a large number of antelope in the herd, as we saw many footprints, but those of the elephant were on the top. Later on the elephant began to go slower, stopping more frequently for food, and at this point I told the rest of the men and carriers to stay further behind, taking only Sunguweli and Chimangemange with me. After following a little further, we saw where he had begun to look for a resting-place for the day. The sun had by this time been getting stronger, and the elephant had circled round several ant-heaps, but not being satisfied with the locality, had struck off towards a piece of very thick bush, several square miles in extent. After going about a mile further, we got into thick bush and knew that he was now pretty close. Moving now with great caution, we were soon into bush which was so thick, together with the tall grass

Approaching an Elephant

that grew among it, that it was impossible to see more than a few feet in front. All at once we heard the elephant trumpet not very far away.

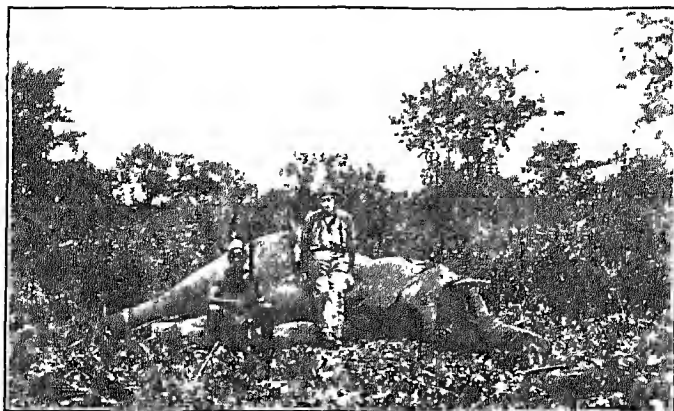
An elephant must not be alarmed, as otherwise he will crash away through the bush and not stop again for a long distance. After a while we located his whereabouts in a very dense piece of bush, and having got the exact direction of the wind, advanced towards the place slowly and carefully, at times pushing our way through the thicket and at times crawling almost on hands and knees in our efforts to get nearer without making a noise. By following his occasional trumpeting we succeeded in approaching within about fifteen yards, but closer it was inadvisable to go, lest he should take alarm. After looking very carefully into the bush I could at last make out a dark form, but which was the head and which the tail it was impossible to say, so thick was the intervening vegetation. A slight movement could be discerned at one spot on this large black mass, and as this could be no other than the ear flapping, I was enabled to locate the heart approximately. Taking careful aim with my double .500 express, I fired both barrels in rapid succession at this spot. In a second the huge animal rushed out to the left, knocking down a large tree, the branches of which just missed us as it fell. The danger in having to get so close to an elephant in thick bush is that, if it does not drop with the first shots, it may trample one to death as it rushes away, since it is almost impossible for a man to make his way with any speed through such a tangled mass. After the

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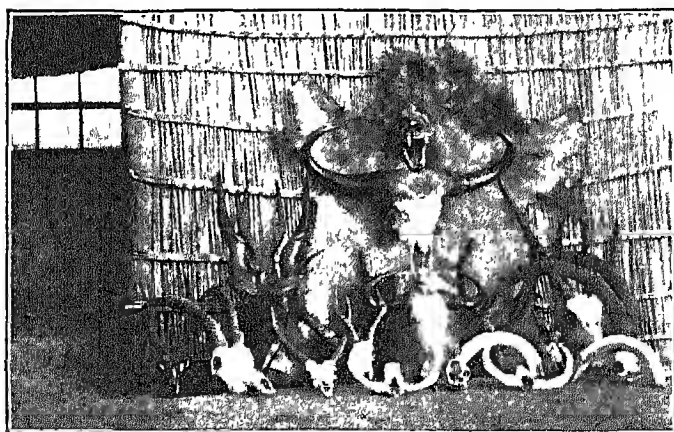
animal had gone a few yards there was a crash, followed by a thud, which told us that he had fallen, but almost at once he rose again, thus indicating that he had only been badly wounded; and now began the fight in earnest, as the elephant was trying to locate his enemies, not in order that he might fly from them, but that he might destroy them.

After standing still for a few minutes, during which time we could hear him breathing heavily (which made *me think that one or both shots had pierced the lungs*), he moved away, turning round more to our left than in the first instance. After the cracking of the bush had died out in the distance, we started on the track, noting as we came to where he had fallen a large pool of blood. As we went on the bush got thicker and thicker, and the trees, although by no means tall, were laced together with vines and creepers, the dark green foliage being so dense that one could not see three feet in advance. To add to this, every possible intervening space was filled up with tall elephant grass, growing to a height of ten or twelve feet.

Whenever a chance offered one of my men would climb a tree, and so great was their excitement that no attention was paid to the fact that nearly all these were thorn, and that the trunks were almost as prickly as the branches. We must have continued in this manner for about three hundred yards, when Sunguweli, who was up a tree on my right, suddenly dropped like a stone from a height of about twelve feet, tearing himself rather badly with the thorns in his fall. I did not know what was wrong, but suspected that the



AN ELEPHANT



SOME OF THE AUTHOR'S TROPHIES

Extracting the Tusks

elephant was pretty close, at the same time involuntarily bringing the rifle to my shoulder. As I did this, almost at the same moment Chimangemange gave my shirt a pull, and I happened to glance up, when I saw among the vegetation in front and slightly to one side, but only some three or four feet from my head, the elephant's trunk feeling backwards and forwards above me. This was a little unexpected. However, I raised my rifle higher and fired, the shot travelling up through the roof of the elephant's mouth and, as it proved afterwards, entering the brain. Without waiting to see the result we turned and ran, nor did we stop until we had gone perhaps a hundred yards, then sitting down to see if we could locate any sound.

We waited some considerable time, but hearing nothing, turned back along the same track very cautiously, till we came near the spot where I had fired the last shot. When we reached there, however, the elephant was lying dead. Had I not happened to look up just at the moment when the man behind touched me, the elephant would probably have almost immediately caught me in his trunk, when the encounter would have ended in his favour.

The rest of the caravan soon came up and I set them to work to clear away some of the surrounding vegetation, in order to take a photograph of the carcass.

We camped at a water-hole some little distance away, and then the work of cutting up the meat and extracting the tusks began. The tusks are cut out of the bony mass which holds them, and which forms the front of the skull, with axes. When a tusk has been

In South Central Africa

removed, there is a short ceremony to be gone through in taking out the fleshy matter or nerve which fills up the cavity in the tusk. A man takes the tusk in both hands, by the end which projects from the head, and walking backwards, pulls it after him some distance into the bush. He then with a small piece of stick removes the filling, and returns in the same manner. It is supposed by the natives that the nerve matter is responsible for the death of a man, should the elephant kill him, and it must therefore be treated in this special manner in order that no harm may come to anyone who had to do with the death of the elephant. The tusk is then stuffed with some moist matter, generally the chewed vegetable fibre out of the elephant's stomach, and the end is sealed with a big leaf, which is tied over the side with a piece of fibre in the same manner as the paper covering is put on a jam-pot. The moist material inside prevents the ivory from drying too quickly, and so splitting.

The tit-bits of an elephant are supposed to be the heart and a piece of the trunk. From this elephant I had a piece of the latter ; but although the cook had it stewing in the pot for nearly a day, it was still almost too tough to eat when served. It somewhat resembled the hump of a sacred ox in texture, but was less tender.

When the stomach had been removed, there was, as usual, a scramble for the fat, much of which still remained inside the cavity. I saw three men make a rush for this, and all three together were at one time completely out of sight inside the carcass. It is

Medicine

usual to keep the tail as a trophy. On a young elephant the hairs on the tail are often two feet or more in length, but these hairs are never seen on an elephant in captivity, except perhaps as a few stumpy bristles. In Central Africa they are used by the natives for making necklaces, bracelets, etc., being supposed to bestow on the wearer some special charm.

When the elephant had been killed the news seemed to spread with marvellous rapidity, and soon some of the neighbouring villagers arrived with their wives, children, goods and chattels. When my men had removed all the meat that they wanted, these people would make some small houses or *m'sasas* near the carcass and live there until they had completely consumed it, not till then returning to their villages.

Native women must not approach close to the carcass for some time after the animal has been killed, but may look upon it from a distance. The male children who had never seen an elephant before had to be introduced in rather a peculiar way. Their father took them by the hand and, walking up to the carcass, they each put one foot on some of the vegetable matter that had come out of its stomach. They were then supposed to be guarded from any evil influence which the spirit of the dead elephant might try to exercise upon them.

Some of the meat was dried, and one of my men kept a little piece of it for quite a long time, telling me afterwards that he required it to make medicine with. It is quite a common thing for natives to make medicine for all sorts of purposes. I once had a man

In South Central Africa

named Mwanakatambwa, whose chief duty it was to look after my bicycle and to mend any punctures, which I had taught him to do. Once we had to travel over a tract of country where there were numbers of thorn trees, and as was to be expected, I had several punctures. This set the bicycle man thinking, and soon he hit upon a splendid idea. He had noticed that all the punctures were due to one kind of thorn, so he got some small pieces of the wood of a tree on which this thorn grew, and cutting them into lengths of about an inch, bored a little hole through the middle of each. These sticks were then put through the fire and just charred, and afterwards exposed to the moonlight for several nights; but he would not tell me the exact particulars, as he considered the medicine a patent. One morning when getting on my bicycle I noticed that these little pieces of stick were tied neatly in front of the frame; this, he informed me, would prevent a puncture. As we had by that time passed through the thorn country I had no more punctures, and Mwanakatambwa of course imputed the result to the medicine. This medicine was left on my machine, and it got to be quite a joke in camp among the other White Men, who used to tell me that I afterwards believed in it just as much as did my native.

CHAPTER XVII

The low country—The Machinga escarpment—The Aluanu Valley—M'lenji
—Cool current of air—Good cotton ground—The Asenga—Leopards—
Large canoes—Impala.

THE southern half of the Central African continent can be divided into two portions, which go under the general designation of the high country and the low. The climate of the former, which is really the Great Central Tableland of the continent, is not extreme, and although considerable heat is experienced at certain seasons, it is possible for Europeans to live in it for a fairly long period without requiring a change; at the same time this must not be taken as meaning that it is entirely suitable for White Men. In the low country the temperature rises to a very high point, while it seldom falls, even in the cooler weather, to what in England would be considered comfortable. In those parts where the atmosphere is dry there is not much discomfort experienced, but where it contains much moisture, as in the wet season and near swampy country, the heat becomes almost unbearable. In such places it is impossible for a White Man to exist for any length of time without change of climate. There are of course exceptions, as I know of two Whites who have been living in the low country for many years without a change.

In South Central Africa

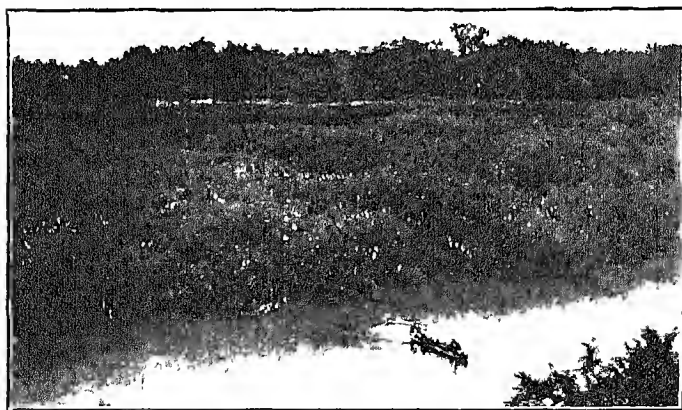
In many places large rivers have cut their way into the tableland, valleys being thus formed with an elevation but little greater than that of the low ground, which extends from the foot of the tableland to the coast. As these valleys are shut in by the sides of the tableland, or escarpments, the heat in them at certain seasons is extreme. South-east from Broken Hill, and about fifty miles from it, as one is travelling through the bush at an elevation of nearly four thousand feet, almost without any warning the path leads on to the edge of the escarpment. Here a wonderful panorama is unfolded. Far below extends the Aluanu Valley, reaching to the eastward for over a hundred miles, and on the opposite side, far away, can be seen the escarpment forming the southern wall of the valley.

At the point where the path reaches the edge a magnificent view can be obtained if the season is suitable. One is here standing on the rim and looking down into the bottom, over two thousand feet below. The villages can be seen with their gardens, which are distinguishable from the forest by the lighter shade of green of the crops. The waters of the Lusenfwa River glitter in the sun, as it winds its tortuous course from where it leaves the gorge in the Machinga escarpment towards the centre of the valley, when it turns eastward, flowing slowly down towards the Luangwa and Zambesi.

So fine and so unusual was this view, that near where the descent of the escarpment began, I got my natives to clear a small promontory of all the bushes and trees growing on it, and often when passing up or down the



HAVING A WASH



CROSSING THE LUSENFWA

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The Machinga Escarpment

escarpment I used to sit here for a while and watch the different effects. They are in some respects similar to those at the Grand Canyon of the Colorado River in Arizona; the light effects appear to be always changing and they are at times most beautiful. Should anyone who reads this ever be in the vicinity and desire to see the view for himself—possibly one of the finest views in all Rhodesia—let him wait till the first rains have freshened up the country and it has assumed a green tint, and then let him journey to the Chifukunyu Mountain in the Northern Machinga escarpment of the Aluanu Valley. From the top of this peak, some five thousand feet above sea-level and nearly four thousand above the valley below, he will obtain a view of Central African scenery not to be forgotten. In the dry season, a haze remains in the valley, limiting the vision and obscuring the distant ranges of mountains; so, in order to get the full effects, the date of the visit must be properly chosen.

The country seen from this point on a clear day includes the valley of the Lukasashi on the east and of the Lusenfwa on the west. These two rivers unite, and flowing on till they join the Luangwa some distance further down, continue to the Zambesi. Beyond the Luangwa junction a range of mountains juts out and obscures any further view of the valley, but over this range can be seen another, and again a larger one behind that, the peaks of which show up in the peculiar blue colour so characteristic of great distance in a clear atmosphere.

The mountains in the far distance remind one of the

In South Central Africa

Rockies, although the sense of vastness with which one is impressed on seeing the American mountains is somewhat wanting here, as is also the grandeur of the Alps. But in the place of these there is a something which does not make itself felt either in the Alps or the Rockies, and which must be seen to be understood.

After climbing down the escarpment, a different country is entered upon. In the highlands one is accustomed to sleep at night with a covering of one or more blankets, but as soon as the valley is reached this covering is discarded, nothing at all being required.

The natives of the Aluanu belong to a different tribe and have customs of their own, and the vegetation now met with is of a different kind. In the valley frost is unknown, and in the hot season I have known the temperature in a sheltered spot to reach 120° F. in the shade. This can really be called hot. When the dry season becomes fairly well advanced, it is almost impossible to travel during the day; instead, one travels by moonlight, and when the sun begins to rise, chooses a shady spot near a river, if possible, and then tries to go to sleep until the sun has gone down again. This is, however, rather a hard business, as great heat prevents one from obtaining much sleep. The ground during the daytime becomes so hot that the natives are unable to tread on it with their bare feet without blistering them.

It may generally be said of the high country that the nights are cool, so that one can almost always sleep with comfort there.

M'lenji

There is one spot in the valley of the Lusenfwa or Alualu country, as it is generally known, that is an exception to the rule. The gorge of the Lusenfwa River has in the course of ages worn its way back into the escarpment for some miles. This gorge is between one and two thousand feet deep, but it is narrow, the result being that the rocks of which its sides are formed are only exposed to the sun for a short period during the daytime and remain comparatively cool. The river flowing below also tends to lower the temperature in the gorge, as in places much spray is produced at the small falls and rapids. When the sun has gone down and the Alualu is still sweltering in the heat, on account of its being shut in by high walls all round, a current of cool air begins to flow out of the Lusenfwa gorge, making itself felt to a distance of nearly a mile into the valley. The temperature of this atmospheric current is several degrees below that of the air in the valley, and makes just the difference which is required in order that one may sleep with comfort. Owning some land near this place, known as M'lenji, I made a point of building my house on a small knoll right in the centre of this current of air, with the result that when in other parts of the valley the heat made sleep rather difficult, at M'lenji one could always turn in with the assurance of a good night's rest.

In the vicinity of the rivers the soil is alluvial, being formed by the denuding action of the river upon the high country, the floods then carrying the silt to the valleys and depositing it there as heavy alluvial soil. This is very fertile, but much of the soil of the valley

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away from the river is of a light sandy nature and very stony, and not suitable for the raising of most kinds of crops.

Cotton grows to perfection in the alluvial soil, and in these valleys there is a large acreage which might be used for the cultivation of cotton. The soil is of great depth in some places and would grow many other crops besides cotton, without much manure being required for some time to come.

The Lusenfwa valley is inhabited by the Aluanu, who are distantly allied to the Chicunda of the Zambesi Valley, while the Lukasashi Valley is inhabited by the Asenga. The women of the Asenga tribe wear a metal ornament, circular in form, in their upper lip, which causes the lip to protrude to a considerable extent. This is supposed to be a point of beauty; they consider that a woman with an artificial protuberance of the upper lip of one inch is twice as beautiful as her sister whose lip only extends forward half an inch. These Asenga women have a peculiar method of wearing their hair, shaving both sides of the head and leaving only a strip like the mane of a horse, about one and a half inches wide, down the centre of the head. The shaving operation used to be done with a native-made knife, but now on arrival in an Asenga village it is no uncommon thing for the local beauties to come and ask if one has an empty whisky bottle to give them; the bottle is broken up and the sharp edges of the fragments are used for shaving the head.

The Asenga eat all kinds of frogs and certain kinds



VILLAGE ENCLOSED BY LEOPARD-PROOF FENCE



A BUSH BUCK

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Leopards

of snakes, and are in some ways rather looked down upon by the surrounding tribes. Near the junction of the Lusenfwa and Lukasashi rivers a great many of the villages are provided with tall fences, for the purpose of keeping the leopards out at night. The fence is made of reeds and grass tied on to a framework of poles, and on the top of the grass a number of thorn branches are placed, forming an effectual obstruction even to a leopard. Towards evening everyone goes inside this stockade and the gate is shut, not to be opened again until sunrise next morning. A leopard generally attacks its prey from behind, springing upon it and gripping the back of the neck, which it often breaks in the operation. After sucking the blood it sometimes leaves the carcass without touching the flesh, which the hyenas, however, soon discover and consume. Leopards are very fond of dogs as food, and one has always to take the greatest care of dogs at night if any leopards are about, as if they are left outside they are almost invariably killed.

Some places in this low country are free from "fly," and now and then one sees a few cattle, but these generally look as if they had a hard struggle to keep alive. I noticed that a herd of buffalo had come down from the high country and had been through a part of the valley where the natives told me there was no "fly." A herd of buffalo coming from a tsetse region always carry some "fly" with them, and this country which was previously supposed to be free would now be unsafe for domestic cattle. Zebra, buffalo, and eland, if found near a "fly" country through which they had recently

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passed, may generally be taken as having some tsetse about them. In view of this fact transport riders are put to great risk, as they may be travelling through what is considered perfectly safe country and yet their cattle may be struck by a few insects that have been carried a long way by a herd of big game.

It is worthy of note that the low-country people, should they have migrated to the high country, generally express a desire to return, and they do this sooner or later. Perhaps their country is more typically African than that at the higher elevation, and thus appeals to them as Africa does to those who leave her, having once known her well.

Some quite large canoes, from a native point of view, are to be met with on the lower Lusufwa River. I have seen one that would hold ten men easily and that was shaped somewhat like a built boat. The man who owned this canoe had once been down the Zambesi River and had seen the boats used by the Portuguese there; on his return he had tried to imitate them, in so far that he had shaped the outside of his dug-out more or less after their model.

The most common antelope in the Alualu Valley is the impala, the males of which species are extremely graceful, having beautifully shaped horns. They are to be found in fairly large herds and are not difficult to approach. The natives do some very pretty work on their skins, stretching them out on a frame and cutting elaborate patterns on the inner side with the point of a knife.

In common with the puku and the letchwi, the

Impala

females of the impala, who have no horns, greatly outnumber the males.

^R Beside the rivers bushbuck are met with. This is an extremely game little animal, and when wounded will do its best to use its horns at close quarters.

CHAPTER XVIII

Feira and Zumbo—German-sausage tree—Ground thorns—A Portuguese inland fort—Cachombo—Hostile natives—Boromo Mission—Tete—The rise of the Zambesi—Mango groves—The lower Zambesi.

AT the junction of the Luangwa and the Zambesi, on either side of the first-named river, are the stations of Feira and Zumbo, the former in British territory and the latter in Portuguese. Zumbo is the farthest fort from the sea occupied by the Portuguese. Travelling down the Zambesi by boat for some days, we reached the settlement of Cachombo, where, as at Zumbo, there is a fort with a commandant and some native soldiers under his command.

All over this low country there is a tree which grows near water, bearing a fruit composed of hard, heavy, fibrous matter. These fruits are of no use, but on account of their likeness to a large German sausage the tree has been given the nickname of the "German-sausage tree." It forms a splendid shade for the traveller, but as a "German sausage" weighing quite a number of pounds may fall off at any time, the shelter of these trees is generally avoided. If a native happened to be lying down and to be hit on the head by one, the result would probably be fatal.

On approaching Cachombo, I noticed that my men

A Portuguese Inland Fort

were taking great care how they walked, not raising their feet from the ground, but shuffling them along one after the other. On inquiring the reason for this, they said it was on account of a peculiar thorn which is found there. This on investigation proved to be the seed, about the size of a pea, of a small creeping plant, the seed having four very sharp thorns on the outside, so placed that no matter how it lay one thorn always pointed upward. This seed is very plentiful for some weeks in the year. I noticed that the dogs which belonged to the people in the settlement were quite aware of the existence of these thorns, and kept to the path over which natives had recently trod and from which the thorns had consequently been removed. When away from houses and the main roads, in the vicinity of which the ground was swept free from thorns, the dogs moved with as much caution as the natives.

The commandant of the fort proved to be a very jovial individual, and on discovering that I had a camera with me was very anxious that his photo should be taken. To this I readily agreed, with the result that he ordered all his troops to parade, so as to be included in the picture. He had a white mule in the fort, which he mounted and then rode up in front of his troops, who were drawn up in a single line with two small cannon, one on either side, brought down from the walls for the occasion. In bringing down these cannon both wheels came off one of them, and these had to be temporarily put on before the photograph could be taken. After the ceremony was over we adjourned to the commandant's house inside the fort and drank gin,

In South Central Africa

which is the most usual and by far the best spirit to drink in such a country.

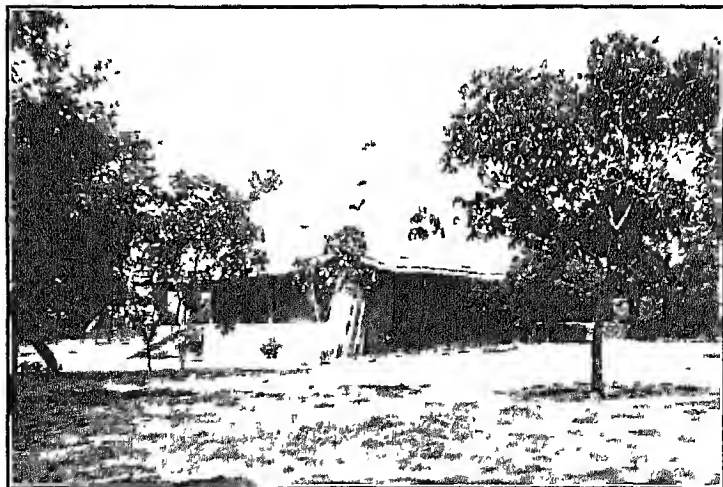
The commandant related stories of bygone deeds of the Portuguese, and indeed they must have been a great nation to have colonised as they did much of the African coast some hundreds of years ago.

Cachombo is built along one main street, the fort being at the east end between the road and the river, and the houses all on the opposite side, further upstream, and facing the river. The houses are constructed in regular Portuguese style, with stone walls some feet thick and tiled roofs. They afford good protection from the heat, and are pleasantly cool during the hot part of the day, all the doors and windows being closed beforehand to keep the heat out. In all their low-country settlements the Portuguese plant quantities of the "Pride of India" tree. These trees, they say, have the property of counteracting the malarial germ, because of the quinine they are supposed to contain. They grow in many places where other trees would not, and multiply so quickly as to impoverish the soil, so that nothing of any consequence will afterwards grow in the vicinity.

Tete, the capital of Portuguese East Africa, is built on the south side of the Zambesi, about one hundred and fifty miles down-stream from Cachombo. The road after leaving the latter place skirts the river for about one day's march, till Chicoo is reached; then leaving the river, it cuts directly across country towards the capital, rejoining the Zambesi at Boromo and then keeping along the bank to Tete. The commandant



PORTUGUESE COMMANDANT AND TROOPS



A PORTUGUESE SETTLER'S HOUSE

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Hostile Natives

at Cachombo informed me that the natives had risen between Chicó and Boromo, but I did not pay much attention to this, as such rumours are very often exaggerated. On arriving at Chicó the White Man in charge of the African Lakes Corporation Store showed me the usual hospitality. When I got to Tete, some days later, word came in by natives that he was dead, having succumbed to black-water fever in the interval.

On leaving Chicó all seemed quiet, but about two days' journey further on, a native of a village through which we were passing told one of my men that we should probably be attacked. The surrounding natives were very anxious to secure rifles with which to fight the Portuguese, and knowing that I had several, would have attacked me in order that they might obtain possession of my rifles. These particular natives discriminate between the Portuguese and the British, and they had at that time a grudge against the Portuguese only. Unlike the more inland tribes, they do not desire to kill out all the White Men, as they realise that the latter bring considerable wealth into their country. Still, if one is going to be attacked, one doesn't bother much about the precise reason. My men, however, thought that it would afford me a certain amount of satisfaction to know that, if I were killed, it would not be because the natives disliked me personally, but only because they wanted my goods.

The whole country is split up into districts, which are sold by auction every few years. The buyer of one of these districts has then the right to collect what tax

In South Central Africa

he can from the natives. It can easily be seen to what abuses this system may lend itself, especially when the temporary owners are unscrupulous men. Things go so far that there is often a rebellion. It was for some such reason that the rising of which we had been warned had been brought about.

Late one afternoon, on passing near a village, one of my men thought he saw some natives up in the hills behind, and after discussing the matter we decided that *the best plan would be to push on instead of staying there* that night, as intended. I was averse to altering my plan, as there was an Indian trader in the village from whom I had intended to buy some provisions. We did, however, go on for a good distance further, entering another district, chiefly on the advice of one of my men, who appeared most anxious that we should not stop. On thinking over this afterwards, it appeared to be pretty evident that he knew exactly what was going to happen, although he would not admit as much to me. Next morning the first news we received before starting was that the village we had passed had been attacked, the Indian killed, and his store looted and burnt. This had taken place almost immediately after our caravan had passed through.

At Boromo there is a large Jesuit mission station, the chief buildings of which are on the top of a small hill about two or three hundred feet above the surrounding country. From there a magnificent view can be obtained of several of the bends of the Zambesi River, as it winds away eastward towards Tete. There were some fifteen men and seven women of European nation-

Boromo Mission

ality at this station. Almost all the nations were represented except the British; the Father Superior was a Frenchman and I believe that most of the sisters were American. These missionaries do excellent work among the natives, teaching them, among other things, useful trades such as building, carpentry, etc.

It was quite a surprise, after climbing the small hill from behind, to find on the top the main building, a large three-storied stone edifice with glass windows and an iron roof. This is one of the first signs of civilisation as the traveller comes within measurable distance of the east coast.

Boromo marks the highest point on the Zambesi to which steamers, starting from the mouth of the river, can ascend, as the first rapids, which form an effectual barrier to navigation, are found a very few miles from the mission. In front of the mission one could see the stern-wheel steamer which transports all the mission supplies from the coast. Perhaps the line on which some improvement might be made in the working of this mission would be not to lay quite so much stress on using only local material, where possible. For example, the paddle of the steamer was driven by a chain from the engine, one link of which had been broken. Now, had the missing link been sent for to Europe, it could have been delivered at the mission at a cost of a few shillings. Rather than write for it, however, one of the White brothers and two native mechanics had been trying for some days to make a substitute out of hippo hide, with the result that a great deal more time had been spent on this

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particular fragment of machinery than it was worth, and in the end, what was produced was at best only a poor equivalent. The principle is good if not carried to an extreme, for some of the commercial concerns in parts of Central Africa rely altogether too much on imported articles, when excellent substitutes can be made from local material at the same or even at lower cost.

The missionaries belonging to this mission come out for life, only leaving if compelled to do so from their health breaking down. Unfortunately this is the case with practically all of them, as the climate is very trying so far inland at such a low altitude.

The town of Tete stands on the south bank of the river, and rises gradually from the bank to the fort, the latter being built at the highest point. It contains a population of several hundred Whites, including the Portuguese soldiers of which the garrison is largely composed. The native populace is large and they are allowed to live in the town, which is a great mistake, as there are almost no sanitary arrangements. When the rains start, therefore, all the filth which has accumulated during the dry season is washed down from the rising ground towards the river-bank, where all the best houses are situated, and it lies there till the heavy rains come and wash everything into the river.

Just about this season of the year the death-rate is high. Among the Portuguese soldiers they were burying on an average one White Man per day during the fortnight that I stayed there. This was, however, at

The Rise of the Zambesi

the beginning of the wet season and consequently the worst time of the year.

As the heavy rains commence some weeks earlier in the interior, the Zambesi River begins to rise at Tete before there has been much local rain. This is the sign for renewed commercial activity, as towards the end of the dry season the river gets too low for navigation, and only the very shallow-draught steamers can then ply between Tete and the coast. When the river rises, all the merchandise that has accumulated during the previous few months is put in motion again. The steamers are all of light draught and of the river stern-wheeled type, and they carry little except fuel and passengers, the freight being loaded in steel barges which are lashed alongside. As there are many sandbanks in the river, the positions of which are often changing, the barges are more easily managed when close alongside than if towed in a row behind, as in the latter case sharp turns cannot be negotiated. When it is too shallow for a steamer, passengers are sometimes sent in a house-boat. This is simply a barge with some berths fixed up in it, and being of shallow draught and light, it can be propelled by a crew of natives with long poles. This method of travel is however very tedious, especially when going against the current, and weeks are sometimes spent in covering a comparatively short distance, the passengers in the end having to leave the boat and travel the rest of the way by carrier. When the river is full, the journey between Tete and Chinde occupies only a few days.

When the Jesuits first came to the country, many

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years ago, they planted among other fruit the mango, which now grows to perfection. In the vicinity of Tete and at places along the river are to be found several large groves or orchards of these trees. The White Man on whose estate these groves are situated will often lease one to a native by the year for a small sum; the native then brings the fruit into town for sale. Several good mangoes can generally be bought for the equivalent of a penny, and when they are plentiful the price is much less. These mangoes always seemed to me to taste better than those grown at the coast, but that was probably on account of my having come from the interior, where latterly I had had little fresh fruit.

On the river, in those parts where there is much traffic, both crocodile and hippo have become somewhat wary, and it is seldom that a good opportunity occurs of getting a shot at them in the water. They can sometimes, however, be caught asleep on a sand-bank, where they offer an excellent target. Many passengers who are entering the country for the first time amuse themselves by shooting at crocodiles in the water, but the number of kills in this way is small.

On the lower Zambesi, by which is meant that portion below Tete, there are several sugar plantations, but work on these is not carried out on a large scale. All this part of Portuguese East Africa is administered by the Mozambique Company, which is a somewhat similar organisation to the British South Africa Company of Rhodesia.

Before the railroads entered North-Western Rhodesia, the short route into North-Eastern Rhodesia was either



A LOW-COUNTRY EAGLE



A WART-HOG

The Lower Zambesi

up the Zambesi and Shire Rivers to Lake Nyassa and then across country, or via Tete and thence to Fort Jameson. Now that the railway has reached Broken Hill, almost all the passenger traffic to Fort Jameson, the capital of North-Eastern Rhodesia, passes that way, so that there is now much less through transport passing Tete than was the case a few years ago.

CHAPTER XIX

Lake Tanganyika—The Tanganyika Plateau—Spread of sleeping-sickness—
Lake Nyassa—Kungu—The Livingstonia Mission—Kota Kota—Fort
Johnstone—Lake Pamalombi—The Shire River—Crocodiles—Blantyre.

LAKE Tanganyika is situated at an elevation of two thousand seven hundred feet above sea-level and is some three hundred and sixty miles in length, being just a little longer than Lake Nyassa. Ujiji, on the eastern shore of Tanganyika and about half-way between its two extremities, is the principal town on its shores and is now in German East Africa; but before the Germans took over the country it was a great Arab stronghold, from which a considerable trade in the way of slaves and ivory was done with Zanzibar. There are a few small steamers on the lake. As an illustration of how things can be made to do duty totally different from that for which they were intended, the case of the steamer "Good News" may be mentioned. The cylinder cover had been blown off and recovered, but the nuts for the bolts had been lost, and a traveller relates that the steamer put to sea with the cylinder cover held in place by two bicycle spanners, screwed up tight, while, instead of packing, cow-dung had been used.

A railway is now being constructed by the Germans from the coast to a point on the east side of Tanganyika.

Spread of Sleeping-sickness

This line will tap a stretch of fertile land near the coast, but it will probably be a long time before it reaches the lake, as there is little rubber further inland and less ivory.

It is on the plateau between the south end of Lake Tanganyika and the north end of Lake Nyassa that the Congo really has its source. On this plateau there rises from a small group of trees and creepers a tiny stream, which towards the south-west develops into the Chambesi River flowing into Lake Bangweulu. Following the stream still further, we find it called between Lakes Bangweulu and Mweru the Luapula; on leaving Mweru the river is known as the Lualaba, and this in turn becomes the mighty Congo.

The trade route between Lakes Tanganyika and Nyassa is known as the Stephenson Road and is fairly direct, crossing the plateau. It was hoped in the early days that this high ground would eventually support a large European population, who would make their living by raising herds of cattle. These hopes have, however, proved illusory, as there is now a much smaller White population on the plateau than was the case ten or fifteen years ago. What is more serious, however, is the spread of sleeping-sickness, which first appeared in these parts on the shores of Lake Tanganyika, and from there crept gradually over the plateau, till it has now established itself on the north end of Lake Nyassa.

It is a curious fact that one is much more liable to sea-sickness during rough weather on fresh water than on salt. The captain of the steamer "Queen Victoria,"

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a boat of some hundred tons, which plies on Lake Nyassa, told me that this was the case, and that many people who were never sick on the sea became so on the lake in rough weather. This was certainly my own experience, but being somewhat prone to the malady, I put it down to ordinary causes.

The trans-continental telegraph line skirts the western shore of Lake Nyassa and then crosses the plateau between the lakes, known as the Tanganyika Plateau, to the southern end of Tanganyika; one is therefore quite in touch there with the outer world.

In the days when the country was first opened up and for some little time afterwards, the freight on goods from the sea-coast to Lake Tanganyika was at the rate of £80 per ton. I believe it is now about half that sum.

Karonga is the most northerly British station on Lake Nyassa, and here one embarks on the steamer for a sail of over three hundred miles to the south end of the lake.

Sometimes, when steaming along, one observes what appears in the distance to be a rain-storm or detached mass of clouds moving over the surface of the lake. On approaching nearer and being perhaps unavoidably enveloped by a small portion of it, the cloud is found to be composed of myriads of small flies. These flies, or Kungu, as the natives call them, are hatched in the water of the lake, and rising into the air, they are carried hither and thither by the wind. When driven on shore they are collected by the natives and pressed into round cakes, which are considered rather a delicacy.

The Livingstonia Mission

The first point of call south of Karonga is Florence Bay, the landing-place for the Livingstone Mission, which stands on the edge of the Nyika Plateau, some thousands of feet above the level of the lake at Kondowe.

The early pioneers of this mission were among the first White Men to navigate Lake Nyassa, and their first settlement was built near the south end of the lake, on a promontory known as Cape McClear. From this station, on account of its unhealthy surroundings, they moved to Bandawe, much further north, but here again the surroundings proved unfavourable and from time to time death claimed his heavy toll, as can be seen by the well-filled graveyard. It was then decided to abandon the lake shores as a site for the head-quarters of the mission, and the Livingstonia Institute now stands at Kondowe.

The present head of the mission, the Rev. Robert Law, D.D., has been in the Nyassa region for over thirty years. He is the only survivor of the first party of pioneers who entered the lake district to take up the work there. Numbers of natives now come to Kondowe to learn different trades, and at the same time to hear what the missionaries have to tell them. They are taught those things for which they show a special aptitude and are at the same time instructed in the gospel, those who prove themselves willing and capable being then sent over the surrounding country, far and wide, on the work of evangelisation.

We are constantly being told that it is impossible to understand how to treat a native until you have lived

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in his country for some time, and with this I heartily agree. But many of the people who say this allow themselves to criticise the work of missions which they have never even visited and of which they have only a very hazy notion, probably because they have employed a native who has once been to a mission and has perhaps turned out badly. If the former contention is correct, then surely a mission should at least be visited and its work inquired into, before an opinion is pronounced upon it.

Towards the northern end of Lake Nyassa the mountain ranges approach close to the shore. Looking across the lake from Kondowe, the Livingstone Range rises abruptly on the German East African shore, and so clear is the atmosphere at times that, although at this point the lake measures nearly forty miles across, the mountains seem so near and the lake so far below, as almost to give the impression of a large river with the mountains on either side as its banks. Lake Nyassa is very deep, and although its surface is at an elevation of fifteen hundred feet above sea-level, its bottom is in some parts many feet below sea-level.

Some distance south of Bandawe, on the western shore, we come to the town of Kota Kota. This was formerly a great Arab centre and slave-trading town, as the slave routes from all parts of the country to the west of the lake converged here. At this place the slaves were sorted and marshalled into gangs, after which they were ferried across the lake, to begin the last stage of their toilsome journey to the coast.

Fort Johnstone

The district of Kota Kota produces a quantity of rice, but it is all consumed locally, as the excessive freight charges to the coast prohibit all thought of export.

A few miles down the Shire River from the southern end of the lake has been built the European settlement of Fort Johnstone, close to a large Mohammedan village. The town of Fort Johnstone, if it may be called a town, consists of some Government buildings, chiefly made up of the magistrate's department and the head-quarters of the naval force. The latter includes a gunboat on the lake and several stores, and a stranger generally puts up at one of these. The inhabitants take great pride in showing the visitor the town and especially the cemetery. As the climate of the place can certainly be called bad, there are a number of deaths among the Europeans and a funeral is not an uncommon occurrence. I once visited Fort Johnstone on my way through, and returning in a very few weeks stayed there for a few days; the interval had added two new graves to the cemetery. It is in places such as this that the reality of the uphill fight which the White Man is making on the outskirts of civilisation is impressed on one. The same tale is told at every little settlement in Central Africa. Be it deserted or occupied, there is always close at hand a small graveyard recording the toll that the country has exacted from its alien conquerors.

The Shire River at Fort Johnstone contains quantities of a perch-like fish which the natives catch in nets. For the sum of a few pence a week a native will supply a house with fresh fish three times a day. Coming from the interior this fish is quite a luxury, but to the regular

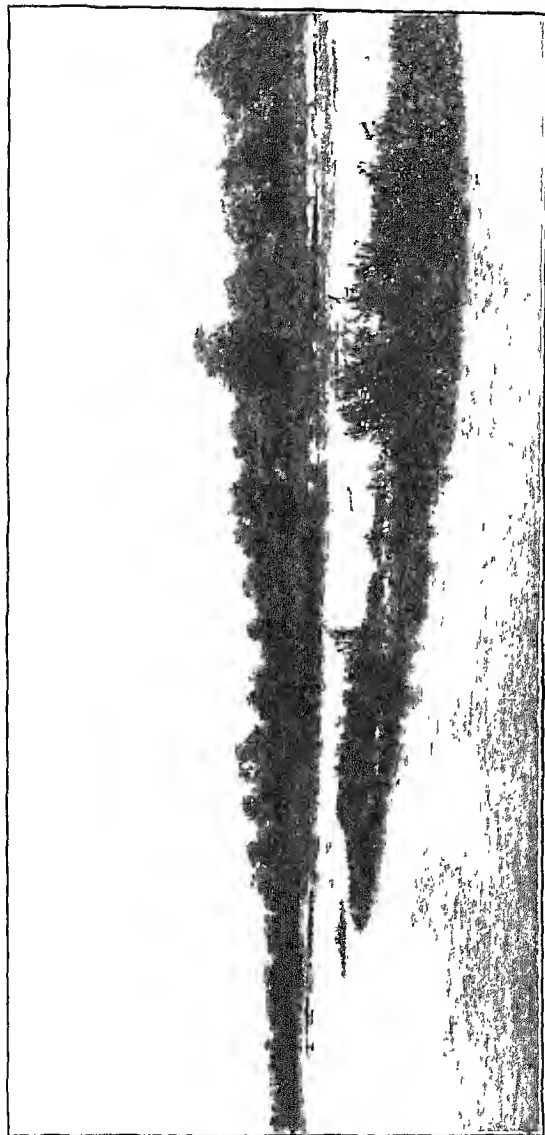
In South Central Africa

inhabitant the same kind of fish three times a day, week after week, must become somewhat monotonous.

The level of Lake Nyassa has been falling of late years, as marks made by the missionaries on rocks, soon after their arrival, at the then high-water mark, are now from ten to twelve feet vertical above the present level of the lake. The reason for this fall is probably to be found in the erosion of the river-bed below the lake; in course of time this may silt up again, and so raise the water-level to its original mark.

A few miles below Fort Johnstone the Shire River opens out into a little shallow lake, a few miles long, known as Pamalombi. When the river is low the lake becomes so empty that the steamer actually sails through mud. On one journey that I made, the mud became so thick, that on looking overboard it appeared almost impossible for the steamer to force her way any further; she eventually managed to do this, however, moving forward inch by inch. In some places in Pamalombi the water is beautifully clear, and although only a few feet deep, shoals of fish of brilliant colours can be seen darting about among the various water-plants below the steamer.

The decaying vegetable matter in the mud generates much marsh-gas, which is released when the mud is disturbed by the passage of the steamer and rises to the surface in innumerable small bubbles. Should these bubbles on reaching the surface catch fire, either from a lighted match being thrown overboard or a spark from the furnaces, the surface of the water becomes one mass of flame. When this takes place the only thing



THE LOWER SHIRE RIVER

Crocodiles

to do is to stop the steamer ; after the disturbing motion has ceased the discharge of gas gradually lessens and the fire goes out. Should the boat be driven faster ahead, the stirring up of the mud becomes accentuated, with the result that a larger quantity of gas is set free, the flame of which is a grave danger to the steamer. The story is told of a man who dropped a lighted match into the lavatory when sailing over Pamalombi ; this ignited what proved to be a dangerous mixture of marsh-gas and air, the result being that an explosion ensued and he was blown through the door. The gas had come in through the discharge-pipe in the bottom of the steamer.

The Shire River is navigable on both its upper and lower reaches during the season of high water, but these reaches are divided by the Murchison Rapids, which prevent boats from traversing its whole length.

The river is full of crocodiles, especially the upper reaches, and as one sails along, semicircular stockades of poles are to be seen jutting out into the river in front of all the villages, each end projecting a short distance up the bank. These are to enable the people to wash and to obtain water without the risk of being caught by a crocodile.

If a crocodile has become very undesirable, it is sometimes killed in the following manner. A baby is tied to a post some distance from the water's edge, on a sandbank or clearing, while natives armed with strong spears hide in the bushes or reeds on either side near the edge. The youngster soon begins to remonstrate, and its cries attract the crocodile, which leaves the water

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and advances towards the bait. As soon as it has got a little way from the bank the natives rush out, and getting between it and the river, kill the crocodile with sticks and spears.

One has to travel some forty miles from where the steamer stops on the upper Shire before reaching Blantyre, the chief town in Nyassaland. There are fairly good roads through the country round the town, this part being known as the Shire Highlands. The town itself is at an elevation of about three thousand feet, and is the centre of a growing industry of cotton-planting, which is now taking the place of coffee. Zomba, the capital and seat of the administration, is about forty miles north of Blantyre.

The Church of Scotland Mission has its head-quarters at Blantyre, and their church is famed throughout British Central Africa as an example of what can be done with local material. Over one hundred varieties and shapes of bricks were used in its construction, all the bricks being made on the spot.

The Malanji Mountains lie at the back of Blantyre, and fine specimens of the indigenous cedar tree are to be seen at fairly high altitudes. The mission has built a small house at an elevation of about eight thousand feet, and by staying up there for a few weeks the missionaries obtain a new lease of life, which enables them the better to continue their labours at the lower levels. The journey from Blantyre to the coast is now quite a simple one, as the railway runs from the town to Chiromo, on the lower Shire, from which point a steamer takes one down the Shire and

Blantyre

Zambesi rivers to Chinde, on the coast, where ocean steamers call.

One is generally glad to leave Chinde, as it is built on a small sandbank among the mangrove swamps, and if some days have been spent there doing nothing except waiting for the ocean steamer, among the sand, frogs, and mosquitoes which abound, the relief on getting to sea is very great. Still, notwithstanding all its pests and fevers, it is always with a sigh of regret that one who has lived in the little-known regions inland bids farewell to that fascinating country, South Central Africa.